Question 1 [25 marks]

0: $\text{primes}(4) = 2^2$

1: $\text{primes}(7) = 7^1$

2: $\text{primes}(8) = 2^3$

3: $\text{primes}(4) = 2^2$

4: $\text{primes}(5) = 5^1$

5: $\text{primes}(7) = 7^1$

6: $\text{primes}(3) = 3^1$

7: $\text{primes}(3) = 3^1$

8: $\text{primes}(4) = 2^2$

9: $\text{primes}(4) = 2^2$

10: $\text{primes}(2) = 2^1$

11: $\text{primes}(7) = 7^1$

12: $\text{primes}(8) = 2^3$

13: $\text{primes}(2) = 2^1$

14: $\text{primes}(5) = 5^1$

15: $\text{primes}(6) = 2^1 \times 3^1$

16: $\text{primes}(10) = 2^1 \times 5^1$

17: $\text{primes}(6) = 2^1 \times 3^1$

18: $\text{primes}(4) = 2^2$

19: $\text{primes}(7) = 7^1$

20: $\text{primes}(8) = 2^3$

21: $\text{primes}(9) = 3^2$

22: $\text{primes}(2) = 2^1$

23: $\text{primes}(8) = 2^3$

24: $\text{primes}(4) = 2^2$

25: $\text{primes}(9) = 3^2$

prm_2to10

Question 2 [25 marks]

0: $\text{primes}(4) = 2^2$

1: $\text{primes}(9) = 3^2$

2: $\text{primes}(10) = 2^1 \times 5^1$

3: $\text{primes}(5) = 5^1$

4: $\text{primes}(6) = 2^1 \times 3^1$

5: $\text{primes}(6) = 2^1 \times 3^1$

6: $\text{primes}(9) = 3^2$

7: $\text{primes}(3) = 3^1$

8: $\text{primes}(6) = 2^1 \times 3^1$

9: $\text{primes}(2) = 2^1$

10: $\text{primes}(10) = 2^1 \times 5^1$

11: $\text{primes}(7) = 7^1$

12: $\text{primes}(2) = 2^1$

13: $\text{primes}(10) = 2^1 \times 5^1$

14: $\text{primes}(10) = 2^1 \times 5^1$

15: $\text{primes}(4) = 2^2$

16: $\text{primes}(8) = 2^3$

17: $\text{primes}(5) = 5^1$

18: $\text{primes}(10) = 2^1 \times 5^1$

19: $\text{primes}(6) = 2^1 \times 3^1$

20: $\text{primes}(6) = 2^1 \times 3^1$

21: $\text{primes}(6) = 2^1 \times 3^1$

22: $\text{primes}(8) = 2^3$

23: $\text{primes}(9) = 3^2$

24: $\text{primes}(6) = 2^1 \times 3^1$

25: $\text{primes}(3) = 3^1$

prm_2to10

Question 3 [25 marks]

0: $\text{primes}(10) = 2^1 \times 5^1$

1: $\text{primes}(2) = 2^1$

2: $\text{primes}(6) = 2^1 \times 3^1$

3: $\text{primes}(7) = 7^1$

4: $\text{primes}(10) = 2^1 \times 5^1$

5: $\text{primes}(8) = 2^3$

6: $\text{primes}(6) = 2^1 \times 3^1$

7: $\text{primes}(3) = 3^1$

8: $\text{primes}(8) = 2^3$

9: $\text{primes}(4) = 2^2$

10: $\text{primes}(10) = 2^1 \times 5^1$

11: $\text{primes}(7) = 7^1$

12: $\text{primes}(2) = 2^1$

13: $\text{primes}(7) = 7^1$

14: $\text{primes}(7) = 7^1$

15: $\text{primes}(8) = 2^3$

16: $\text{primes}(9) = 3^2$

17: $\text{primes}(9) = 3^2$

18: $\text{primes}(7) = 7^1$

19: $\text{primes}(8) = 2^3$

20: $\text{primes}(4) = 2^2$

21: $\text{primes}(4) = 2^2$

22: $\text{primes}(10) = 2^1 \times 5^1$

23: $\text{primes}(7) = 7^1$

24: $\text{primes}(3) = 3^1$

25: $\text{primes}(5) = 5^1$

prm_2to10

Question 4 [25 marks]

0: $\text{primes}(9) = 3^2$

1: $\text{primes}(9) = 3^2$

2: $\text{primes}(6) = 2^1 \times 3^1$

3: $\text{primes}(7) = 7^1$

4: $\text{primes}(8) = 2^3$

5: $\text{primes}(8) = 2^3$

6: $\text{primes}(7) = 7^1$

7: $\text{primes}(7) = 7^1$

8: $\text{primes}(9) = 3^2$

9: $\text{primes}(4) = 2^2$

10: $\text{primes}(10) = 2^1 \times 5^1$

11: $\text{primes}(10) = 2^1 \times 5^1$

12: $\text{primes}(2) = 2^1$

13: $\text{primes}(10) = 2^1 \times 5^1$

14: $\text{primes}(2) = 2^1$

15: $\text{primes}(4) = 2^2$

16: $\text{primes}(8) = 2^3$

17: $\text{primes}(10) = 2^1 \times 5^1$

18: $\text{primes}(10) = 2^1 \times 5^1$

19: $\text{primes}(8) = 2^3$

20: $\text{primes}(7) = 7^1$

21: $\text{primes}(8) = 2^3$

22: $\text{primes}(6) = 2^1 \times 3^1$

23: $\text{primes}(7) = 7^1$

24: $\text{primes}(3) = 3^1$

25: $\text{primes}(7) = 7^1$

prm_2to10

Question 5 [25 marks]

0: primes(7) = 7^1

1: primes(9) = 3^2

2: primes(10) = $2^1 \times 5^1$

3: primes(6) = $2^1 \times 3^1$

4: primes(7) = 7^1

5: primes(2) = 2^1

6: primes(8) = 2^3

7: primes(8) = 2^3

8: primes(5) = 5^1

9: primes(7) = 7^1

10: primes(8) = 2^3

11: primes(6) = $2^1 \times 3^1$

12: primes(5) = 5^1

13: primes(8) = 2^3

14: primes(4) = 2^2

15: primes(2) = 2^1

16: primes(4) = 2^2

17: primes(5) = 5^1

18: primes(4) = 2^2

19: primes(9) = 3^2

20: primes(6) = $2^1 \times 3^1$

21: primes(9) = 3^2

22: primes(10) = $2^1 \times 5^1$

23: primes(8) = 2^3

24: primes(6) = $2^1 \times 3^1$

25: primes(8) = 2^3

prm_2to10

Question 6 [25 marks]

0: primes(3) = 3^1

1: primes(5) = 5^1

2: primes(6) = $2^1 \times 3^1$

3: primes(7) = 7^1

4: primes(8) = 2^3

5: primes(5) = 5^1

6: primes(2) = 2^1

7: primes(4) = 2^2

8: primes(5) = 5^1

9: primes(2) = 2^1

10: primes(3) = 3^1

11: primes(3) = 3^1

12: primes(8) = 2^3

13: primes(10) = $2^1 \times 5^1$

14: primes(3) = 3^1

15: primes(9) = 3^2

16: primes(8) = 2^3

17: primes(4) = 2^2

18: primes(2) = 2^1

19: primes(8) = 2^3

20: primes(7) = 7^1

21: primes(4) = 2^2

22: primes(4) = 2^2

23: primes(9) = 3^2

24: primes(2) = 2^1

25: primes(3) = 3^1

prm_2to10

Question 7 [25 marks]

0: $\text{primes}(5) = 5^1$

1: $\text{primes}(7) = 7^1$

2: $\text{primes}(8) = 2^3$

3: $\text{primes}(5) = 5^1$

4: $\text{primes}(6) = 2^1 \times 3^1$

5: $\text{primes}(8) = 2^3$

6: $\text{primes}(5) = 5^1$

7: $\text{primes}(2) = 2^1$

8: $\text{primes}(4) = 2^2$

9: $\text{primes}(8) = 2^3$

10: $\text{primes}(8) = 2^3$

11: $\text{primes}(3) = 3^1$

12: $\text{primes}(10) = 2^1 \times 5^1$

13: $\text{primes}(7) = 7^1$

14: $\text{primes}(9) = 3^2$

15: $\text{primes}(9) = 3^2$

16: $\text{primes}(6) = 2^1 \times 3^1$

17: $\text{primes}(6) = 2^1 \times 3^1$

18: $\text{primes}(3) = 3^1$

19: $\text{primes}(5) = 5^1$

20: $\text{primes}(4) = 2^2$

21: $\text{primes}(2) = 2^1$

22: $\text{primes}(6) = 2^1 \times 3^1$

23: $\text{primes}(6) = 2^1 \times 3^1$

24: $\text{primes}(9) = 3^2$

25: $\text{primes}(6) = 2^1 \times 3^1$

prm_2to10

Question 8 [25 marks]

0: $\text{primes}(6) = 2^1 \times 3^1$

1: $\text{primes}(6) = 2^1 \times 3^1$

2: $\text{primes}(6) = 2^1 \times 3^1$

3: $\text{primes}(10) = 2^1 \times 5^1$

4: $\text{primes}(2) = 2^1$

5: $\text{primes}(3) = 3^1$

6: $\text{primes}(4) = 2^2$

7: $\text{primes}(8) = 2^3$

8: $\text{primes}(7) = 7^1$

9: $\text{primes}(9) = 3^2$

10: $\text{primes}(9) = 3^2$

11: $\text{primes}(9) = 3^2$

12: $\text{primes}(6) = 2^1 \times 3^1$

13: $\text{primes}(2) = 2^1$

14: $\text{primes}(2) = 2^1$

15: $\text{primes}(2) = 2^1$

16: $\text{primes}(8) = 2^3$

17: $\text{primes}(9) = 3^2$

18: $\text{primes}(3) = 3^1$

19: $\text{primes}(9) = 3^2$

20: $\text{primes}(8) = 2^3$

21: $\text{primes}(6) = 2^1 \times 3^1$

22: $\text{primes}(9) = 3^2$

23: $\text{primes}(3) = 3^1$

24: $\text{primes}(3) = 3^1$

25: $\text{primes}(3) = 3^1$

prm_2to10

Question 9 [25 marks]

0: $\text{primes}(17) = 17^1$

1: $\text{primes}(92) = 2^2 \times 23^1$

2: $\text{primes}(74) = 2^1 \times 37^1$

3: $\text{primes}(78) = 2^1 \times 3^1 \times 13^1$

4: $\text{primes}(69) = 3^1 \times 23^1$

5: $\text{primes}(99) = 3^2 \times 11^1$

6: $\text{primes}(84) = 2^2 \times 3^1 \times 7^1$

7: $\text{primes}(14) = 2^1 \times 7^1$

8: $\text{primes}(62) = 2^1 \times 31^1$

9: $\text{primes}(31) = 31^1$

10: $\text{primes}(24) = 2^3 \times 3^1$

11: $\text{primes}(23) = 23^1$

12: $\text{primes}(4) = 2^2$

13: $\text{primes}(62) = 2^1 \times 31^1$

14: $\text{primes}(94) = 2^1 \times 47^1$

15: $\text{primes}(73) = 73^1$

16: $\text{primes}(84) = 2^2 \times 3^1 \times 7^1$

17: $\text{primes}(7) = 7^1$

18: $\text{primes}(6) = 2^1 \times 3^1$

19: $\text{primes}(26) = 2^1 \times 13^1$

20: $\text{primes}(72) = 2^3 \times 3^2$

21: $\text{primes}(88) = 2^3 \times 11^1$

22: $\text{primes}(71) = 71^1$

23: $\text{primes}(56) = 2^3 \times 7^1$

24: $\text{primes}(92) = 2^2 \times 23^1$

25: $\text{primes}(21) = 3^1 \times 7^1$

prm_2to100

Question 10 [25 marks]

0: $\text{primes}(14) = 2^1 \times 7^1$

1: $\text{primes}(57) = 3^1 \times 19^1$

2: $\text{primes}(26) = 2^1 \times 13^1$

3: $\text{primes}(22) = 2^1 \times 11^1$

4: $\text{primes}(21) = 3^1 \times 7^1$

5: $\text{primes}(85) = 5^1 \times 17^1$

6: $\text{primes}(30) = 2^1 \times 3^1 \times 5^1$

7: $\text{primes}(7) = 7^1$

8: $\text{primes}(68) = 2^2 \times 17^1$

9: $\text{primes}(58) = 2^1 \times 29^1$

10: $\text{primes}(79) = 79^1$

11: $\text{primes}(18) = 2^1 \times 3^2$

12: $\text{primes}(54) = 2^1 \times 3^3$

13: $\text{primes}(27) = 3^3$

14: $\text{primes}(52) = 2^2 \times 13^1$

15: $\text{primes}(58) = 2^1 \times 29^1$

16: $\text{primes}(61) = 61^1$

17: $\text{primes}(51) = 3^1 \times 17^1$

18: $\text{primes}(53) = 53^1$

19: $\text{primes}(72) = 2^3 \times 3^2$

20: $\text{primes}(21) = 3^1 \times 7^1$

21: $\text{primes}(25) = 5^2$

22: $\text{primes}(17) = 17^1$

23: $\text{primes}(13) = 13^1$

24: $\text{primes}(16) = 2^4$

25: $\text{primes}(54) = 2^1 \times 3^3$

prm_2to100

Question 11 [25 marks]

0: $\text{primes}(11) = 11^1$

1: $\text{primes}(79) = 79^1$

2: $\text{primes}(67) = 67^1$

3: $\text{primes}(78) = 2^1 \times 3^1 \times 13^1$

4: $\text{primes}(86) = 2^1 \times 43^1$

5: $\text{primes}(25) = 5^2$

6: $\text{primes}(17) = 17^1$

7: $\text{primes}(18) = 2^1 \times 3^2$

8: $\text{primes}(71) = 71^1$

9: $\text{primes}(18) = 2^1 \times 3^2$

10: $\text{primes}(45) = 3^2 \times 5^1$

11: $\text{primes}(34) = 2^1 \times 17^1$

12: $\text{primes}(85) = 5^1 \times 17^1$

13: $\text{primes}(33) = 3^1 \times 11^1$

14: $\text{primes}(51) = 3^1 \times 17^1$

15: $\text{primes}(90) = 2^1 \times 3^2 \times 5^1$

16: $\text{primes}(18) = 2^1 \times 3^2$

17: $\text{primes}(88) = 2^3 \times 11^1$

18: $\text{primes}(85) = 5^1 \times 17^1$

19: $\text{primes}(29) = 29^1$

20: $\text{primes}(44) = 2^2 \times 11^1$

21: $\text{primes}(53) = 53^1$

22: $\text{primes}(32) = 2^5$

23: $\text{primes}(9) = 3^2$

24: $\text{primes}(69) = 3^1 \times 23^1$

25: $\text{primes}(83) = 83^1$

prm_2to100

Question 12 [25 marks]

0: $\text{primes}(32) = 2^5$

1: $\text{primes}(20) = 2^2 \times 5^1$

2: $\text{primes}(16) = 2^4$

3: $\text{primes}(9) = 3^2$

4: $\text{primes}(86) = 2^1 \times 43^1$

5: $\text{primes}(62) = 2^1 \times 31^1$

6: $\text{primes}(56) = 2^3 \times 7^1$

7: $\text{primes}(62) = 2^1 \times 31^1$

8: $\text{primes}(23) = 23^1$

9: $\text{primes}(3) = 3^1$

10: $\text{primes}(45) = 3^2 \times 5^1$

11: $\text{primes}(6) = 2^1 \times 3^1$

12: $\text{primes}(86) = 2^1 \times 43^1$

13: $\text{primes}(8) = 2^3$

14: $\text{primes}(95) = 5^1 \times 19^1$

15: $\text{primes}(6) = 2^1 \times 3^1$

16: $\text{primes}(64) = 2^6$

17: $\text{primes}(25) = 5^2$

18: $\text{primes}(35) = 5^1 \times 7^1$

19: $\text{primes}(66) = 2^1 \times 3^1 \times 11^1$

20: $\text{primes}(17) = 17^1$

21: $\text{primes}(56) = 2^3 \times 7^1$

22: $\text{primes}(87) = 3^1 \times 29^1$

23: $\text{primes}(35) = 5^1 \times 7^1$

24: $\text{primes}(98) = 2^1 \times 7^2$

25: $\text{primes}(71) = 71^1$

prm_2to100

Question 13 [25 marks]

0: $\text{primes}(83) = 83^1$

1: $\text{primes}(100) = 2^2 \times 5^2$

2: $\text{primes}(58) = 2^1 \times 29^1$

3: $\text{primes}(75) = 3^1 \times 5^2$

4: $\text{primes}(51) = 3^1 \times 17^1$

5: $\text{primes}(35) = 5^1 \times 7^1$

6: $\text{primes}(67) = 67^1$

7: $\text{primes}(57) = 3^1 \times 19^1$

8: $\text{primes}(87) = 3^1 \times 29^1$

9: $\text{primes}(33) = 3^1 \times 11^1$

10: $\text{primes}(56) = 2^3 \times 7^1$

11: $\text{primes}(23) = 23^1$

12: $\text{primes}(69) = 3^1 \times 23^1$

13: $\text{primes}(48) = 2^4 \times 3^1$

14: $\text{primes}(72) = 2^3 \times 3^2$

15: $\text{primes}(5) = 5^1$

16: $\text{primes}(73) = 73^1$

17: $\text{primes}(90) = 2^1 \times 3^2 \times 5^1$

18: $\text{primes}(54) = 2^1 \times 3^3$

19: $\text{primes}(80) = 2^4 \times 5^1$

20: $\text{primes}(64) = 2^6$

21: $\text{primes}(65) = 5^1 \times 13^1$

22: $\text{primes}(60) = 2^2 \times 3^1 \times 5^1$

23: $\text{primes}(89) = 89^1$

24: $\text{primes}(32) = 2^5$

25: $\text{primes}(29) = 29^1$

prm_2to100

Question 14 [25 marks]

0: $\text{primes}(9) = 3^2$

1: $\text{primes}(8) = 2^3$

2: $\text{primes}(82) = 2^1 \times 41^1$

3: $\text{primes}(48) = 2^4 \times 3^1$

4: $\text{primes}(8) = 2^3$

5: $\text{primes}(98) = 2^1 \times 7^2$

6: $\text{primes}(9) = 3^2$

7: $\text{primes}(96) = 2^5 \times 3^1$

8: $\text{primes}(46) = 2^1 \times 23^1$

9: $\text{primes}(4) = 2^2$

10: $\text{primes}(34) = 2^1 \times 17^1$

11: $\text{primes}(63) = 3^2 \times 7^1$

12: $\text{primes}(15) = 3^1 \times 5^1$

13: $\text{primes}(57) = 3^1 \times 19^1$

14: $\text{primes}(69) = 3^1 \times 23^1$

15: $\text{primes}(91) = 7^1 \times 13^1$

16: $\text{primes}(85) = 5^1 \times 17^1$

17: $\text{primes}(7) = 7^1$

18: $\text{primes}(5) = 5^1$

19: $\text{primes}(42) = 2^1 \times 3^1 \times 7^1$

20: $\text{primes}(99) = 3^2 \times 11^1$

21: $\text{primes}(19) = 19^1$

22: $\text{primes}(30) = 2^1 \times 3^1 \times 5^1$

23: $\text{primes}(71) = 71^1$

24: $\text{primes}(88) = 2^3 \times 11^1$

25: $\text{primes}(40) = 2^3 \times 5^1$

prm_2to100

Question 15 [25 marks]

0: $\text{primes}(72) = 2^3 \times 3^2$

1: $\text{primes}(85) = 5^1 \times 17^1$

2: $\text{primes}(91) = 7^1 \times 13^1$

3: $\text{primes}(48) = 2^4 \times 3^1$

4: $\text{primes}(70) = 2^1 \times 5^1 \times 7^1$

5: $\text{primes}(62) = 2^1 \times 31^1$

6: $\text{primes}(18) = 2^1 \times 3^2$

7: $\text{primes}(97) = 97^1$

8: $\text{primes}(13) = 13^1$

9: $\text{primes}(48) = 2^4 \times 3^1$

10: $\text{primes}(19) = 19^1$

11: $\text{primes}(83) = 83^1$

12: $\text{primes}(60) = 2^2 \times 3^1 \times 5^1$

13: $\text{primes}(69) = 3^1 \times 23^1$

14: $\text{primes}(50) = 2^1 \times 5^2$

15: $\text{primes}(9) = 3^2$

16: $\text{primes}(24) = 2^3 \times 3^1$

17: $\text{primes}(86) = 2^1 \times 43^1$

18: $\text{primes}(56) = 2^3 \times 7^1$

19: $\text{primes}(69) = 3^1 \times 23^1$

20: $\text{primes}(95) = 5^1 \times 19^1$

21: $\text{primes}(53) = 53^1$

22: $\text{primes}(60) = 2^2 \times 3^1 \times 5^1$

23: $\text{primes}(90) = 2^1 \times 3^2 \times 5^1$

24: $\text{primes}(24) = 2^3 \times 3^1$

25: $\text{primes}(93) = 3^1 \times 31^1$

prm_2to100

Question 16 [25 marks]

0: $\text{primes}(86) = 2^1 \times 43^1$

1: $\text{primes}(10) = 2^1 \times 5^1$

2: $\text{primes}(15) = 3^1 \times 5^1$

3: $\text{primes}(55) = 5^1 \times 11^1$

4: $\text{primes}(19) = 19^1$

5: $\text{primes}(77) = 7^1 \times 11^1$

6: $\text{primes}(10) = 2^1 \times 5^1$

7: $\text{primes}(31) = 31^1$

8: $\text{primes}(83) = 83^1$

9: $\text{primes}(62) = 2^1 \times 31^1$

10: $\text{primes}(33) = 3^1 \times 11^1$

11: $\text{primes}(12) = 2^2 \times 3^1$

12: $\text{primes}(51) = 3^1 \times 17^1$

13: $\text{primes}(4) = 2^2$

14: $\text{primes}(2) = 2^1$

15: $\text{primes}(88) = 2^3 \times 11^1$

16: $\text{primes}(19) = 19^1$

17: $\text{primes}(100) = 2^2 \times 5^2$

18: $\text{primes}(50) = 2^1 \times 5^2$

19: $\text{primes}(33) = 3^1 \times 11^1$

20: $\text{primes}(88) = 2^3 \times 11^1$

21: $\text{primes}(99) = 3^2 \times 11^1$

22: $\text{primes}(10) = 2^1 \times 5^1$

23: $\text{primes}(93) = 3^1 \times 31^1$

24: $\text{primes}(10) = 2^1 \times 5^1$

25: $\text{primes}(9) = 3^2$

prm_2to100

Question 17 [25 marks]

0: $\text{primes}(167) = 167^1$

1: $\text{primes}(143) = 11^1 \times 13^1$

2: $\text{primes}(111) = 3^1 \times 37^1$

3: $\text{primes}(111) = 3^1 \times 37^1$

4: $\text{primes}(180) = 2^2 \times 3^2 \times 5^1$

5: $\text{primes}(179) = 179^1$

6: $\text{primes}(166) = 2^1 \times 83^1$

7: $\text{primes}(134) = 2^1 \times 67^1$

8: $\text{primes}(111) = 3^1 \times 37^1$

9: $\text{primes}(153) = 3^2 \times 17^1$

10: $\text{primes}(158) = 2^1 \times 79^1$

11: $\text{primes}(119) = 7^1 \times 17^1$

12: $\text{primes}(138) = 2^1 \times 3^1 \times 23^1$

13: $\text{primes}(129) = 3^1 \times 43^1$

14: $\text{primes}(122) = 2^1 \times 61^1$

15: $\text{primes}(140) = 2^2 \times 5^1 \times 7^1$

16: $\text{primes}(125) = 5^3$

17: $\text{primes}(168) = 2^3 \times 3^1 \times 7^1$

18: $\text{primes}(115) = 5^1 \times 23^1$

19: $\text{primes}(110) = 2^1 \times 5^1 \times 11^1$

20: $\text{primes}(167) = 167^1$

21: $\text{primes}(127) = 127^1$

22: $\text{primes}(107) = 107^1$

23: $\text{primes}(131) = 131^1$

24: $\text{primes}(127) = 127^1$

25: $\text{primes}(190) = 2^1 \times 5^1 \times 19^1$

prm_100to200

Question 18 [25 marks]

0: $\text{primes}(157) = 157^1$

1: $\text{primes}(129) = 3^1 \times 43^1$

2: $\text{primes}(118) = 2^1 \times 59^1$

3: $\text{primes}(189) = 3^3 \times 7^1$

4: $\text{primes}(162) = 2^1 \times 3^4$

5: $\text{primes}(120) = 2^3 \times 3^1 \times 5^1$

6: $\text{primes}(105) = 3^1 \times 5^1 \times 7^1$

7: $\text{primes}(102) = 2^1 \times 3^1 \times 17^1$

8: $\text{primes}(170) = 2^1 \times 5^1 \times 17^1$

9: $\text{primes}(126) = 2^1 \times 3^2 \times 7^1$

10: $\text{primes}(116) = 2^2 \times 29^1$

11: $\text{primes}(141) = 3^1 \times 47^1$

12: $\text{primes}(196) = 2^2 \times 7^2$

13: $\text{primes}(196) = 2^2 \times 7^2$

14: $\text{primes}(196) = 2^2 \times 7^2$

15: $\text{primes}(132) = 2^2 \times 3^1 \times 11^1$

16: $\text{primes}(185) = 5^1 \times 37^1$

17: $\text{primes}(112) = 2^4 \times 7^1$

18: $\text{primes}(146) = 2^1 \times 73^1$

19: $\text{primes}(176) = 2^4 \times 11^1$

20: $\text{primes}(174) = 2^1 \times 3^1 \times 29^1$

21: $\text{primes}(135) = 3^3 \times 5^1$

22: $\text{primes}(177) = 3^1 \times 59^1$

23: $\text{primes}(129) = 3^1 \times 43^1$

24: $\text{primes}(154) = 2^1 \times 7^1 \times 11^1$

25: $\text{primes}(119) = 7^1 \times 17^1$

prm_100to200

Question 19 [25 marks]

0: $\text{primes}(158) = 2^1 \times 79^1$

1: $\text{primes}(158) = 2^1 \times 79^1$

2: $\text{primes}(165) = 3^1 \times 5^1 \times 11^1$

3: $\text{primes}(192) = 2^6 \times 3^1$

4: $\text{primes}(192) = 2^6 \times 3^1$

5: $\text{primes}(176) = 2^4 \times 11^1$

6: $\text{primes}(101) = 101^1$

7: $\text{primes}(147) = 3^1 \times 7^2$

8: $\text{primes}(197) = 197^1$

9: $\text{primes}(164) = 2^2 \times 41^1$

10: $\text{primes}(191) = 191^1$

11: $\text{primes}(105) = 3^1 \times 5^1 \times 7^1$

12: $\text{primes}(175) = 5^2 \times 7^1$

13: $\text{primes}(138) = 2^1 \times 3^1 \times 23^1$

14: $\text{primes}(100) = 2^2 \times 5^2$

15: $\text{primes}(131) = 131^1$

16: $\text{primes}(108) = 2^2 \times 3^3$

17: $\text{primes}(190) = 2^1 \times 5^1 \times 19^1$

18: $\text{primes}(110) = 2^1 \times 5^1 \times 11^1$

19: $\text{primes}(114) = 2^1 \times 3^1 \times 19^1$

20: $\text{primes}(175) = 5^2 \times 7^1$

21: $\text{primes}(115) = 5^1 \times 23^1$

22: $\text{primes}(158) = 2^1 \times 79^1$

23: $\text{primes}(106) = 2^1 \times 53^1$

24: $\text{primes}(126) = 2^1 \times 3^2 \times 7^1$

25: $\text{primes}(149) = 149^1$

prm_100to200

Question 20 [25 marks]

0: $\text{primes}(154) = 2^1 \times 7^1 \times 11^1$

1: $\text{primes}(107) = 107^1$

2: $\text{primes}(117) = 3^2 \times 13^1$

3: $\text{primes}(165) = 3^1 \times 5^1 \times 11^1$

4: $\text{primes}(199) = 199^1$

5: $\text{primes}(123) = 3^1 \times 41^1$

6: $\text{primes}(112) = 2^4 \times 7^1$

7: $\text{primes}(170) = 2^1 \times 5^1 \times 17^1$

8: $\text{primes}(104) = 2^3 \times 13^1$

9: $\text{primes}(107) = 107^1$

10: $\text{primes}(140) = 2^2 \times 5^1 \times 7^1$

11: $\text{primes}(169) = 13^2$

12: $\text{primes}(120) = 2^3 \times 3^1 \times 5^1$

13: $\text{primes}(193) = 193^1$

14: $\text{primes}(144) = 2^4 \times 3^2$

15: $\text{primes}(162) = 2^1 \times 3^4$

16: $\text{primes}(145) = 5^1 \times 29^1$

17: $\text{primes}(122) = 2^1 \times 61^1$

18: $\text{primes}(182) = 2^1 \times 7^1 \times 13^1$

19: $\text{primes}(181) = 181^1$

20: $\text{primes}(149) = 149^1$

21: $\text{primes}(153) = 3^2 \times 17^1$

22: $\text{primes}(155) = 5^1 \times 31^1$

23: $\text{primes}(131) = 131^1$

24: $\text{primes}(142) = 2^1 \times 71^1$

25: $\text{primes}(109) = 109^1$

prm_100to200

Question 21 [25 marks]

0: $\text{primes}(165) = 3^1 \times 5^1 \times 11^1$

1: $\text{primes}(190) = 2^1 \times 5^1 \times 19^1$

2: $\text{primes}(186) = 2^1 \times 3^1 \times 31^1$

3: $\text{primes}(148) = 2^2 \times 37^1$

4: $\text{primes}(167) = 167^1$

5: $\text{primes}(170) = 2^1 \times 5^1 \times 17^1$

6: $\text{primes}(197) = 197^1$

7: $\text{primes}(135) = 3^3 \times 5^1$

8: $\text{primes}(178) = 2^1 \times 89^1$

9: $\text{primes}(183) = 3^1 \times 61^1$

10: $\text{primes}(187) = 11^1 \times 17^1$

11: $\text{primes}(148) = 2^2 \times 37^1$

12: $\text{primes}(177) = 3^1 \times 59^1$

13: $\text{primes}(187) = 11^1 \times 17^1$

14: $\text{primes}(100) = 2^2 \times 5^2$

15: $\text{primes}(151) = 151^1$

16: $\text{primes}(125) = 5^3$

17: $\text{primes}(137) = 137^1$

18: $\text{primes}(115) = 5^1 \times 23^1$

19: $\text{primes}(159) = 3^1 \times 53^1$

20: $\text{primes}(183) = 3^1 \times 61^1$

21: $\text{primes}(104) = 2^3 \times 13^1$

22: $\text{primes}(163) = 163^1$

23: $\text{primes}(120) = 2^3 \times 3^1 \times 5^1$

24: $\text{primes}(159) = 3^1 \times 53^1$

25: $\text{primes}(163) = 163^1$

prm_100to200

Question 22 [25 marks]

0: $\text{primes}(121) = 11^2$

1: $\text{primes}(186) = 2^1 \times 3^1 \times 31^1$

2: $\text{primes}(102) = 2^1 \times 3^1 \times 17^1$

3: $\text{primes}(105) = 3^1 \times 5^1 \times 7^1$

4: $\text{primes}(200) = 2^3 \times 5^2$

5: $\text{primes}(144) = 2^4 \times 3^2$

6: $\text{primes}(180) = 2^2 \times 3^2 \times 5^1$

7: $\text{primes}(106) = 2^1 \times 53^1$

8: $\text{primes}(188) = 2^2 \times 47^1$

9: $\text{primes}(137) = 137^1$

10: $\text{primes}(111) = 3^1 \times 37^1$

11: $\text{primes}(165) = 3^1 \times 5^1 \times 11^1$

12: $\text{primes}(116) = 2^2 \times 29^1$

13: $\text{primes}(156) = 2^2 \times 3^1 \times 13^1$

14: $\text{primes}(139) = 139^1$

15: $\text{primes}(197) = 197^1$

16: $\text{primes}(162) = 2^1 \times 3^4$

17: $\text{primes}(200) = 2^3 \times 5^2$

18: $\text{primes}(110) = 2^1 \times 5^1 \times 11^1$

19: $\text{primes}(190) = 2^1 \times 5^1 \times 19^1$

20: $\text{primes}(142) = 2^1 \times 71^1$

21: $\text{primes}(194) = 2^1 \times 97^1$

22: $\text{primes}(102) = 2^1 \times 3^1 \times 17^1$

23: $\text{primes}(128) = 2^7$

24: $\text{primes}(126) = 2^1 \times 3^2 \times 7^1$

25: $\text{primes}(186) = 2^1 \times 3^1 \times 31^1$

prm_100to200

Question 23 [25 marks]

0: $\text{primes}(167) = 167^1$

1: $\text{primes}(195) = 3^1 \times 5^1 \times 13^1$

2: $\text{primes}(186) = 2^1 \times 3^1 \times 31^1$

3: $\text{primes}(186) = 2^1 \times 3^1 \times 31^1$

4: $\text{primes}(101) = 101^1$

5: $\text{primes}(126) = 2^1 \times 3^2 \times 7^1$

6: $\text{primes}(129) = 3^1 \times 43^1$

7: $\text{primes}(151) = 151^1$

8: $\text{primes}(136) = 2^3 \times 17^1$

9: $\text{primes}(151) = 151^1$

10: $\text{primes}(138) = 2^1 \times 3^1 \times 23^1$

11: $\text{primes}(168) = 2^3 \times 3^1 \times 7^1$

12: $\text{primes}(186) = 2^1 \times 3^1 \times 31^1$

13: $\text{primes}(155) = 5^1 \times 31^1$

14: $\text{primes}(196) = 2^2 \times 7^2$

15: $\text{primes}(200) = 2^3 \times 5^2$

16: $\text{primes}(164) = 2^2 \times 41^1$

17: $\text{primes}(137) = 137^1$

18: $\text{primes}(133) = 7^1 \times 19^1$

19: $\text{primes}(166) = 2^1 \times 83^1$

20: $\text{primes}(188) = 2^2 \times 47^1$

21: $\text{primes}(118) = 2^1 \times 59^1$

22: $\text{primes}(148) = 2^2 \times 37^1$

23: $\text{primes}(160) = 2^5 \times 5^1$

24: $\text{primes}(129) = 3^1 \times 43^1$

25: $\text{primes}(178) = 2^1 \times 89^1$

prm_100to200

Question 24 [25 marks]

0: $\text{primes}(200) = 2^3 \times 5^2$

1: $\text{primes}(127) = 127^1$

2: $\text{primes}(141) = 3^1 \times 47^1$

3: $\text{primes}(195) = 3^1 \times 5^1 \times 13^1$

4: $\text{primes}(129) = 3^1 \times 43^1$

5: $\text{primes}(124) = 2^2 \times 31^1$

6: $\text{primes}(124) = 2^2 \times 31^1$

7: $\text{primes}(106) = 2^1 \times 53^1$

8: $\text{primes}(178) = 2^1 \times 89^1$

9: $\text{primes}(156) = 2^2 \times 3^1 \times 13^1$

10: $\text{primes}(108) = 2^2 \times 3^3$

11: $\text{primes}(115) = 5^1 \times 23^1$

12: $\text{primes}(153) = 3^2 \times 17^1$

13: $\text{primes}(156) = 2^2 \times 3^1 \times 13^1$

14: $\text{primes}(156) = 2^2 \times 3^1 \times 13^1$

15: $\text{primes}(119) = 7^1 \times 17^1$

16: $\text{primes}(120) = 2^3 \times 3^1 \times 5^1$

17: $\text{primes}(171) = 3^2 \times 19^1$

18: $\text{primes}(109) = 109^1$

19: $\text{primes}(114) = 2^1 \times 3^1 \times 19^1$

20: $\text{primes}(104) = 2^3 \times 13^1$

21: $\text{primes}(175) = 5^2 \times 7^1$

22: $\text{primes}(124) = 2^2 \times 31^1$

23: $\text{primes}(164) = 2^2 \times 41^1$

24: $\text{primes}(183) = 3^1 \times 61^1$

25: $\text{primes}(188) = 2^2 \times 47^1$

prm_100to200

Question 25 [25 marks]

0: $\text{primes}(265) = 5^1 \times 53^1$

1: $\text{primes}(367) = 367^1$

2: $\text{primes}(331) = 331^1$

3: $\text{primes}(438) = 2^1 \times 3^1 \times 73^1$

4: $\text{primes}(367) = 367^1$

5: $\text{primes}(245) = 5^1 \times 7^2$

6: $\text{primes}(297) = 3^3 \times 11^1$

7: $\text{primes}(232) = 2^3 \times 29^1$

8: $\text{primes}(437) = 19^1 \times 23^1$

9: $\text{primes}(334) = 2^1 \times 167^1$

10: $\text{primes}(303) = 3^1 \times 101^1$

11: $\text{primes}(262) = 2^1 \times 131^1$

12: $\text{primes}(317) = 317^1$

13: $\text{primes}(427) = 7^1 \times 61^1$

14: $\text{primes}(455) = 5^1 \times 7^1 \times 13^1$

15: $\text{primes}(378) = 2^1 \times 3^3 \times 7^1$

16: $\text{primes}(430) = 2^1 \times 5^1 \times 43^1$

17: $\text{primes}(416) = 2^5 \times 13^1$

18: $\text{primes}(397) = 397^1$

19: $\text{primes}(432) = 2^4 \times 3^3$

20: $\text{primes}(340) = 2^2 \times 5^1 \times 17^1$

21: $\text{primes}(314) = 2^1 \times 157^1$

22: $\text{primes}(341) = 11^1 \times 31^1$

23: $\text{primes}(369) = 3^2 \times 41^1$

24: $\text{primes}(500) = 2^2 \times 5^3$

25: $\text{primes}(227) = 227^1$

prm_200to500

Question 26 [25 marks]

0: $\text{primes}(498) = 2^1 \times 3^1 \times 83^1$

1: $\text{primes}(388) = 2^2 \times 97^1$

2: $\text{primes}(472) = 2^3 \times 59^1$

3: $\text{primes}(245) = 5^1 \times 7^2$

4: $\text{primes}(291) = 3^1 \times 97^1$

5: $\text{primes}(206) = 2^1 \times 103^1$

6: $\text{primes}(265) = 5^1 \times 53^1$

7: $\text{primes}(287) = 7^1 \times 41^1$

8: $\text{primes}(472) = 2^3 \times 59^1$

9: $\text{primes}(459) = 3^3 \times 17^1$

10: $\text{primes}(349) = 349^1$

11: $\text{primes}(335) = 5^1 \times 67^1$

12: $\text{primes}(440) = 2^3 \times 5^1 \times 11^1$

13: $\text{primes}(385) = 5^1 \times 7^1 \times 11^1$

14: $\text{primes}(252) = 2^2 \times 3^2 \times 7^1$

15: $\text{primes}(365) = 5^1 \times 73^1$

16: $\text{primes}(334) = 2^1 \times 167^1$

17: $\text{primes}(487) = 487^1$

18: $\text{primes}(340) = 2^2 \times 5^1 \times 17^1$

19: $\text{primes}(462) = 2^1 \times 3^1 \times 7^1 \times 11^1$

20: $\text{primes}(482) = 2^1 \times 241^1$

21: $\text{primes}(345) = 3^1 \times 5^1 \times 23^1$

22: $\text{primes}(223) = 223^1$

23: $\text{primes}(242) = 2^1 \times 11^2$

24: $\text{primes}(220) = 2^2 \times 5^1 \times 11^1$

25: $\text{primes}(491) = 491^1$

prm_200to500

Question 27 [25 marks]

0: $\text{primes}(354) = 2^1 \times 3^1 \times 59^1$

1: $\text{primes}(365) = 5^1 \times 73^1$

2: $\text{primes}(339) = 3^1 \times 113^1$

3: $\text{primes}(456) = 2^3 \times 3^1 \times 19^1$

4: $\text{primes}(500) = 2^2 \times 5^3$

5: $\text{primes}(246) = 2^1 \times 3^1 \times 41^1$

6: $\text{primes}(265) = 5^1 \times 53^1$

7: $\text{primes}(280) = 2^3 \times 5^1 \times 7^1$

8: $\text{primes}(272) = 2^4 \times 17^1$

9: $\text{primes}(336) = 2^4 \times 3^1 \times 7^1$

10: $\text{primes}(345) = 3^1 \times 5^1 \times 23^1$

11: $\text{primes}(322) = 2^1 \times 7^1 \times 23^1$

12: $\text{primes}(434) = 2^1 \times 7^1 \times 31^1$

13: $\text{primes}(372) = 2^2 \times 3^1 \times 31^1$

14: $\text{primes}(343) = 7^3$

15: $\text{primes}(439) = 439^1$

16: $\text{primes}(242) = 2^1 \times 11^2$

17: $\text{primes}(492) = 2^2 \times 3^1 \times 41^1$

18: $\text{primes}(215) = 5^1 \times 43^1$

19: $\text{primes}(271) = 271^1$

20: $\text{primes}(351) = 3^3 \times 13^1$

21: $\text{primes}(344) = 2^3 \times 43^1$

22: $\text{primes}(211) = 211^1$

23: $\text{primes}(466) = 2^1 \times 233^1$

24: $\text{primes}(284) = 2^2 \times 71^1$

25: $\text{primes}(422) = 2^1 \times 211^1$

prm_200to500

Question 28 [25 marks]

0: $\text{primes}(372) = 2^2 \times 3^1 \times 31^1$

1: $\text{primes}(293) = 293^1$

2: $\text{primes}(376) = 2^3 \times 47^1$

3: $\text{primes}(298) = 2^1 \times 149^1$

4: $\text{primes}(302) = 2^1 \times 151^1$

5: $\text{primes}(294) = 2^1 \times 3^1 \times 7^2$

6: $\text{primes}(424) = 2^3 \times 53^1$

7: $\text{primes}(415) = 5^1 \times 83^1$

8: $\text{primes}(410) = 2^1 \times 5^1 \times 41^1$

9: $\text{primes}(252) = 2^2 \times 3^2 \times 7^1$

10: $\text{primes}(373) = 373^1$

11: $\text{primes}(221) = 13^1 \times 17^1$

12: $\text{primes}(357) = 3^1 \times 7^1 \times 17^1$

13: $\text{primes}(205) = 5^1 \times 41^1$

14: $\text{primes}(323) = 17^1 \times 19^1$

15: $\text{primes}(256) = 2^8$

16: $\text{primes}(267) = 3^1 \times 89^1$

17: $\text{primes}(383) = 383^1$

18: $\text{primes}(429) = 3^1 \times 11^1 \times 13^1$

19: $\text{primes}(410) = 2^1 \times 5^1 \times 41^1$

20: $\text{primes}(396) = 2^2 \times 3^2 \times 11^1$

21: $\text{primes}(205) = 5^1 \times 41^1$

22: $\text{primes}(455) = 5^1 \times 7^1 \times 13^1$

23: $\text{primes}(448) = 2^6 \times 7^1$

24: $\text{primes}(404) = 2^2 \times 101^1$

25: $\text{primes}(429) = 3^1 \times 11^1 \times 13^1$

prm_200to500

Question 29 [25 marks]

0: $\text{primes}(357) = 3^1 \times 7^1 \times 17^1$

1: $\text{primes}(343) = 7^3$

2: $\text{primes}(395) = 5^1 \times 79^1$

3: $\text{primes}(397) = 397^1$

4: $\text{primes}(211) = 211^1$

5: $\text{primes}(212) = 2^2 \times 53^1$

6: $\text{primes}(212) = 2^2 \times 53^1$

7: $\text{primes}(273) = 3^1 \times 7^1 \times 13^1$

8: $\text{primes}(260) = 2^2 \times 5^1 \times 13^1$

9: $\text{primes}(206) = 2^1 \times 103^1$

10: $\text{primes}(227) = 227^1$

11: $\text{primes}(422) = 2^1 \times 211^1$

12: $\text{primes}(274) = 2^1 \times 137^1$

13: $\text{primes}(473) = 11^1 \times 43^1$

14: $\text{primes}(314) = 2^1 \times 157^1$

15: $\text{primes}(267) = 3^1 \times 89^1$

16: $\text{primes}(481) = 13^1 \times 37^1$

17: $\text{primes}(460) = 2^2 \times 5^1 \times 23^1$

18: $\text{primes}(421) = 421^1$

19: $\text{primes}(320) = 2^6 \times 5^1$

20: $\text{primes}(391) = 17^1 \times 23^1$

21: $\text{primes}(214) = 2^1 \times 107^1$

22: $\text{primes}(227) = 227^1$

23: $\text{primes}(475) = 5^2 \times 19^1$

24: $\text{primes}(303) = 3^1 \times 101^1$

25: $\text{primes}(292) = 2^2 \times 73^1$

prm_200to500

Question 30 [25 marks]

0: $\text{primes}(374) = 2^1 \times 11^1 \times 17^1$

1: $\text{primes}(432) = 2^4 \times 3^3$

2: $\text{primes}(460) = 2^2 \times 5^1 \times 23^1$

3: $\text{primes}(376) = 2^3 \times 47^1$

4: $\text{primes}(203) = 7^1 \times 29^1$

5: $\text{primes}(275) = 5^2 \times 11^1$

6: $\text{primes}(448) = 2^6 \times 7^1$

7: $\text{primes}(306) = 2^1 \times 3^2 \times 17^1$

8: $\text{primes}(435) = 3^1 \times 5^1 \times 29^1$

9: $\text{primes}(339) = 3^1 \times 113^1$

10: $\text{primes}(459) = 3^3 \times 17^1$

11: $\text{primes}(497) = 7^1 \times 71^1$

12: $\text{primes}(388) = 2^2 \times 97^1$

13: $\text{primes}(400) = 2^4 \times 5^2$

14: $\text{primes}(343) = 7^3$

15: $\text{primes}(229) = 229^1$

16: $\text{primes}(480) = 2^5 \times 3^1 \times 5^1$

17: $\text{primes}(432) = 2^4 \times 3^3$

18: $\text{primes}(348) = 2^2 \times 3^1 \times 29^1$

19: $\text{primes}(485) = 5^1 \times 97^1$

20: $\text{primes}(306) = 2^1 \times 3^2 \times 17^1$

21: $\text{primes}(332) = 2^2 \times 83^1$

22: $\text{primes}(401) = 401^1$

23: $\text{primes}(283) = 283^1$

24: $\text{primes}(296) = 2^3 \times 37^1$

25: $\text{primes}(466) = 2^1 \times 233^1$

prm_200to500

Question 31 [25 marks]

0: $\text{primes}(420) = 2^2 \times 3^1 \times 5^1 \times 7^1$

1: $\text{primes}(393) = 3^1 \times 131^1$

2: $\text{primes}(490) = 2^1 \times 5^1 \times 7^2$

3: $\text{primes}(367) = 367^1$

4: $\text{primes}(213) = 3^1 \times 71^1$

5: $\text{primes}(292) = 2^2 \times 73^1$

6: $\text{primes}(422) = 2^1 \times 211^1$

7: $\text{primes}(263) = 263^1$

8: $\text{primes}(440) = 2^3 \times 5^1 \times 11^1$

9: $\text{primes}(499) = 499^1$

10: $\text{primes}(450) = 2^1 \times 3^2 \times 5^2$

11: $\text{primes}(499) = 499^1$

12: $\text{primes}(476) = 2^2 \times 7^1 \times 17^1$

13: $\text{primes}(435) = 3^1 \times 5^1 \times 29^1$

14: $\text{primes}(375) = 3^1 \times 5^3$

15: $\text{primes}(487) = 487^1$

16: $\text{primes}(438) = 2^1 \times 3^1 \times 73^1$

17: $\text{primes}(355) = 5^1 \times 71^1$

18: $\text{primes}(284) = 2^2 \times 71^1$

19: $\text{primes}(331) = 331^1$

20: $\text{primes}(229) = 229^1$

21: $\text{primes}(410) = 2^1 \times 5^1 \times 41^1$

22: $\text{primes}(406) = 2^1 \times 7^1 \times 29^1$

23: $\text{primes}(471) = 3^1 \times 157^1$

24: $\text{primes}(455) = 5^1 \times 7^1 \times 13^1$

25: $\text{primes}(358) = 2^1 \times 179^1$

prm_200to500

Question 32 [25 marks]

0: $\text{primes}(213) = 3^1 \times 71^1$

1: $\text{primes}(314) = 2^1 \times 157^1$

2: $\text{primes}(471) = 3^1 \times 157^1$

3: $\text{primes}(419) = 419^1$

4: $\text{primes}(478) = 2^1 \times 239^1$

5: $\text{primes}(208) = 2^4 \times 13^1$

6: $\text{primes}(235) = 5^1 \times 47^1$

7: $\text{primes}(378) = 2^1 \times 3^3 \times 7^1$

8: $\text{primes}(356) = 2^2 \times 89^1$

9: $\text{primes}(453) = 3^1 \times 151^1$

10: $\text{primes}(411) = 3^1 \times 137^1$

11: $\text{primes}(414) = 2^1 \times 3^2 \times 23^1$

12: $\text{primes}(487) = 487^1$

13: $\text{primes}(330) = 2^1 \times 3^1 \times 5^1 \times 11^1$

14: $\text{primes}(275) = 5^2 \times 11^1$

15: $\text{primes}(397) = 397^1$

16: $\text{primes}(377) = 13^1 \times 29^1$

17: $\text{primes}(459) = 3^3 \times 17^1$

18: $\text{primes}(434) = 2^1 \times 7^1 \times 31^1$

19: $\text{primes}(389) = 389^1$

20: $\text{primes}(437) = 19^1 \times 23^1$

21: $\text{primes}(351) = 3^3 \times 13^1$

22: $\text{primes}(234) = 2^1 \times 3^2 \times 13^1$

23: $\text{primes}(338) = 2^1 \times 13^2$

24: $\text{primes}(245) = 5^1 \times 7^2$

25: $\text{primes}(346) = 2^1 \times 173^1$

prm_200to500