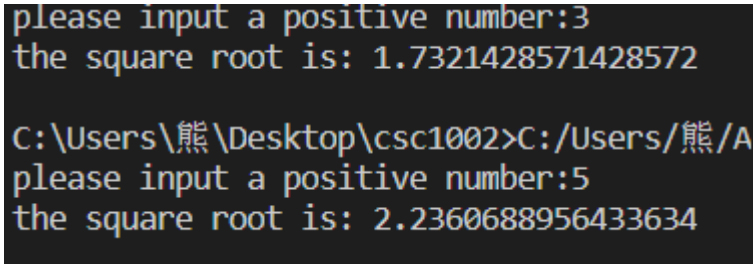
120090828 Assignment2

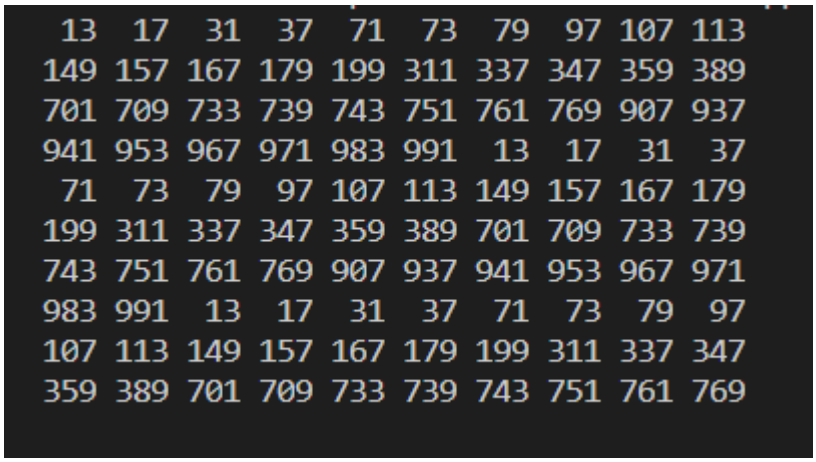
Q1:

1. the question is saved in A2 1.py
2. This program allows users to input a positive number and output its square root through the Newton's law.
   The inputs should be a positive number.
3. Sample output:



Q2:

1. the program is stored in A2 2.py
2. This program output 100 prime numbers whose reverses are also a prime. In each list, there is 10 numbers and they are right aligned.
3. Sample output:



Q3:

1. This program is stored in A2 3.py
2. This program allows users to input a card number which starts from special numbers and the length of it is between 13 and 16. If the input is not card number, they need to keep entering. This number should be an integer.
   According to the rule, the program will see whether the number is valid and output the result.

3. Sample output:

```
please input your card:4388576018402626
is not valid
```

Q4:

1. This program is stored in A2 4.py
2. This program allows users to input two words and to see whether they have the same letters. Then output the result.
   The input must be letters. Or they will keep entering words.
3. Sample output:

```
please input the first word:sdfg
please input the second word:gfds
is an anagram
```

Q5:

1. This program is stored in A2 5.py
2. This program displays the doors that are open after each student changes the state of the after ones.
3. Sample output:

```
C:\Users\熊\Desktop\csc1002>C:/U
the open doors are:
1 3 5 7 9
11 13 15 17 19 21
23 25 27 29 31 33
35 37 39 41 43 45
47 49 51 53 55 57
59 61 63 65 67 69
71 73 75 77 79 81
83 85 87 89 91 93
95 97 99
```

Q6:

1. This program is stored in the A2 5.py
2. This program is a solution of a game. The computer would put “Q” randomly in the puzzle and make sure they would not connect each other. Then output the result.

3. Sample output: