Please implement the following two programs and submit your reports with student's ID and name. Compress your program and reports as a file and named it with your student ID.
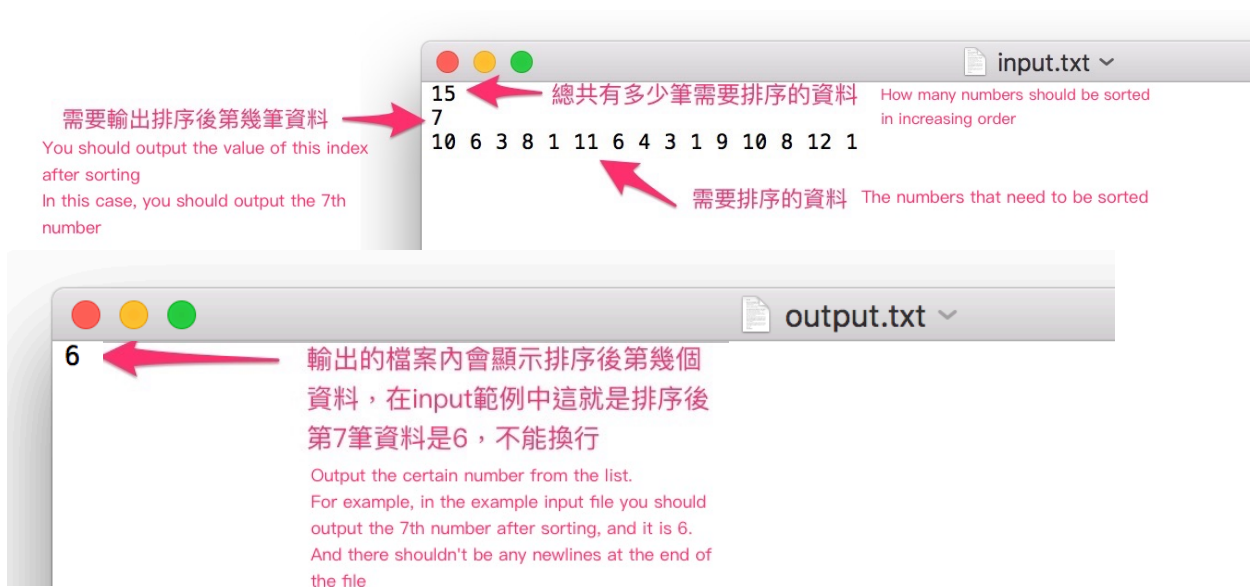
一、Insertion sort

1. Implement an insertion sort program

    Input：input.txt

    Output：output.txt

    The name of the program should be named as studentID__insertion_sort.c/.cpp

輸入一個數字 k，然後輸出第 k 小的數字。Input an index k and output the kth smallest number from your sorted list.

2. Please report how many numbers can be sorted by your program within 30 minutes. Please follow the instruction of docx attached. The file name should be named as student ID and stored as pdf.
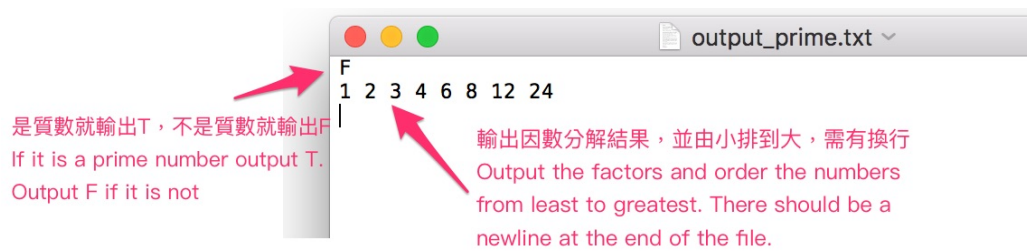
二、Prime Number

1. Please implement a program to check a number whether prime or not.

Input：input_prime.txt

Output：output_prime.txt

The name of the program should be named as studentID__prime.c/.cpp

```
●  ●  ●                           📄 output_prime.txt  ⌄
F
1 2 3 4 6 8 12 24
|
```

是質數就輸出T，不是質數就輸出F
If it is a prime number output T.
Output F if it is not

輸出因數分解結果，並由小排到大，需有換行
Output the factors and order the numbers
from least to greatest. There should be a
newline at the end of the file.

2. Please report the largest prime that your algorithm can find within 30
minutes. Please follow the instruction of docx attached. The file name should be
named as student ID and stored as pdf