Assignment 2

- 1. There is an array with sorted values {3, 10, 15, 30, 55, 77}. Please write a program to read an integer from keyboard, insert this value into proper place of the array so that the new array is still sorted. Output the updated sorted array values.
- 2. Write a program, read a string (use %s, assume the string has no space) and a character. Remove the character from the string and print out the resulting string. For example, if the string is **abcd** and the character is **c**, then the resulting string is **abcd**; if the string is **abcd** and the character is **f**, then the resulting string is still **abcd**.
- 3. Read a line of sentence of English words and then change the first letter of each word to upper case. Output the changed sentence. Assume that the number of characters in the sentence is less than 100. The program should include a sub-function which perform the case change for a sentence.
- 4. Write a program to find and print out all the prime numbers between 5 and 100(inclusive). It is required that the program should include two functions: a main function and a sub-function *intisPrime(int n)*. If *n* is a prime number, the function *isPrime* will return *1* otherwise return *0*. It is required that two functions are put in two *.cpp* files (one for main function, one for *isPrime*). Create one *.hpp* file to put the prototype of sub-function.

Submission requirements:

Givea meaningful name for the program in each question. Compress the .cpp and .hpp files and submit the compressed file into iSpace before 11:55pm,22 April 2020.