Exercises

Q1.

Write a program, use the **pointer** to enter a sequence of integers consist N element (check input N and elements)

Ouput to screen:

- Maximum value of the element in array
- Minimum value of the element in array
- Sum the elements in array

Expected Output:

Enter N = 5

Enter elements: 3 10 9 -5 2

Maximum value of the element in array: 10 Minimum value of the element in array: -5

Sum the elements in array: 19

Q2.

Write a program in C to find the second smallest element in an array.

Test Data:

Input the size of array: 5

Input 5 elements in the array (value must be <9999):

element - 0:0

element - 1:9

element - 2:4

element - 3:6

element - 4:5

Expected Output:

The Second smallest element in the array is: 4

Q3.

Write a program that accepts a string from the user then count total number of alphabets, digits and special characters in a string and print on the screen.

Input:

Input the string: Welcome 2 fpt.edu.vn

Output:

```
Number of Alphabets is: 15

Number of Digits is: 1

Number of Special characters is: 4
```

Q4.

Write a program that accepts a string from the user then find maximum occurring character in a string.

Input:

Input the string: university

Output:

```
The Highest frequency of character 'i' appears number of times: 2
```

Q5

Write a program to read a string through keyboard and sort a string array in ascending order.

Input:

Input the string: university

Output:

```
After sorting the string appears like: eiinrstuvy
```

Q6.

Write a program in C to extract a substring from a given string

Input:

Input the string: FPT University major in software engineering

Input the position to start extraction: 5

Input the length of substring: 3

Output:

The substring retrieve from the string is: Uni

Q7.

Write a program that accepts a string through keyboard from the user then find the largest and smallest word in this string.

Input:

Input the string: FPT University major in software engineering

Expected Output:

The largest word is: engineering

The smallest word is: in