

Programming Fundamentals Lab
(BS-CS-F22_Lab6)

Instructions:

- Attempt the following tasks exactly in the given order.
- For each task, you must create a separate file in VSCode.
- You must complete all tasks individually. Absolutely NO collaboration is allowed.
- Any traces of plagiarism/cheating would result in an “F” grade in this course.
- Indent your code properly (There are special marks for this).
- Use meaningful variable names.
- Use the camel Case notation to name variables. Use meaningful prompt lines/labels for all input/output that is performed by your programs.
- Don't use an online compiler.
- Validate your input (Input validation) -2 for each program if not done in the code.

Tasks

Task1 [10]

Write a function to calculate the sum of all array elements.

Task2 [10]

Write a function that returns largest and second largest element form array.

Task3 [10]

Write a function to count the occurrences of a specific element in an array.

Task4 [10]

Write a function to find the length of a given string (character array).

Task5 [10]

Write a function to count the number of vowels and consonants in a string.

Task6 [10]

Convert all uppercase letters to lowercase and vice versa in a given string (char arary).