C++ Programming Assignment 3

# Question 1:

Write a C++ program to print all the duplicates in the input string. The program should take a string input from the user and print any characters that appear more than once in the string.

## Requirements:

1. The program should take a string as input.  
2. It should print all duplicate characters in the string.  
3. The output should only include characters that appear more than once.  
4. Use appropriate data structures like hash maps or arrays to track character frequencies.

# Question 2:

Write a C++ program to check whether a given character is contained in a string or not and find its position. The program should ask for a string and a character input from the user, then output whether the character exists in the string and its position (if it exists).

## Requirements:

1. The program should take a string and a character as input.  
2. It should search for the character in the string and output the result.  
3. If the character is found, print its position (index) in the string.  
4. If the character is not found, print a message stating that it does not exist.

# Question 3:

Write a C++ program to count the number of vowels and consonants in a string. The program should take a string input from the user and output the count of vowels and consonants in the string.

## Requirements:

1. The program should take a string as input.  
2. It should count the number of vowels (a, e, i, o, u) and consonants in the string.  
3. Ignore non-alphabetic characters such as digits or special symbols.  
4. Print the counts of vowels and consonants separately.

**Submission Guidelines:**

1. Create a folder on your Google Drive for the assignment.
2. Take full-screen screenshots of each task, including both the complete code and the executed output from your system's IDE (online compiler screenshots are not valid).
3. Do not crop or edit the screenshots in any way to maintain clarity.
4. Upload the full-screen screenshots into the folder.
5. After uploading the screenshots, get the [shareable link](https://youtu.be/BbLmHRqHCAw) to the folder.
6. Submit the link to the assignment section.