Experiment3: Title of the Laboratory Exercise: Character and String operations

Introduction and Purpose of Experiment: A string is a sequence of characters. Strings can be manipulated using a number of built in functions. By solving this, students will be able to manipulate string data types.

Note: First 4 programs are compulsory

1. Write a simple program of how to print, concatenate a string.

2. Write a script and use the string slicing with positive and negative indexes.

3. Write a letter of atleast 10 lines and use various methods defined in string class.

Sample Letter:

```
sample_letter = '''Dear <|NAME|>,
```
This is with reference to your job requirement on <|portal_name|> for the role of Sales Manager. I truly believe that my qualifications and experience make me a perfect candidate for the job.

I completed my MBA in Sales and Marketing from <|Institute_Name|>. I have worked as an Area Sales Manager and Assistant Marketing Manager at <|Company_Name|>. During my stint as Area Sales Manager, I conceptualized and executed a Customer Engagement Program that resulted in higher sales. As Assistant Marketing Manager, I worked on the planning and execution of a new product launch. With 4 years of experience in B2B sales and marketing, I have an in-depth understanding of the process. I am confident that I will be the right fit for the job.

I have attached my CV to the email for your reference. Please have a look at it.

I hope to meet you and discuss this opportunity further. Thank you for considering my application for the role.

Best regards,
<|Your Name|>
Mob: <|Your _Contact _Number|>
Email Id: <|Your_ Email _Address|>

Date: <|DATE|>

'''
Hint:

```
name = input("Enter Name\n")

letter = letter.replace("<|NAME|>", name)
```

4. Write a Python program to find duplicate characters in the given string and store them in a list.

5. Write a Python program to check each character in the given string is an alphabet or digit.

6. Write a Python program to count the numbers of occurrences of characters in the given string and store them in a dictionary.

7. Write a Python program to print alphabet pattern 'A'.