Lab Report – 05

1. Implement Python String Operations.

- **Compare Two Strings**

Code:

```
class Vehicle:
  def __init__(self, max_speed, mileage):
     self.max_speed = max_speed
     self.mileage = mileage

v = Vehicle(140, 20)
print(v.max_speed, "\n", v.mileage)
```

- **Join Two or More Strings**

Code:

2. Python program to find number of vowels in a given string.

Code:

```
class Vehicle:
    pass
```

3. Python program to sort the characters in a string.

Code:

```
str1=input("Enter the first string for searching vowels...")
str2=sorted(str1)
print(str2)
```

4. Python program to remove duplicate characters from a string.

Code:

```
str1=input("Enter the first string for searching duplicate...")

str2=""

for str in str1:

    if str not in str2:

        str2 = str2+str

print(str2)
```

5. Python program to list unique characters with their count in a string.

Code:

```
input_string = input("Enter a string: ")
char_count = {}

for char in input_string:
    if char in char_count:
        char_count[char] += 1
    else:
        char_count[char] = 1

for char, count in char_count.items():
    print(f"Character: {char}, Count: {count}")
```

6. Python program to find number of words in a string.

Code:

```
input_string = input("Enter a string: ")

words = input_string.split()

num_words = len(words)
```

```
print(f"Number of words in the string: {num_words}")
```

7. Python program to remove all non-alphabetic characters from a string.

Code:

```
input_string = input("Enter a string: ")

result_string = ""

for char in input_string:
    if char.isalpha():
        result_string += char

print("String with non-alphabetic characters removed:", result_string)
```