

PROGRAMMING FUNDAMENTALS

Lab Experiment #09

OBJECTIVE:

Advanced string manipulation using the `split()` and `replace()` functions in Python.

TOOLS REQUIRED:

Personal computer with windows and Python installed

DESCRIPTION:

This lab focuses on two commonly used string manipulation functions in Python: **`split()`** and **`replace()`**. The **`split()`** function is used to split a string into a list of substrings based on a specified delimiter, while the **`replace()`** function is used to replace occurrences of a specified substring with another substring.

LAB TASK:

1. Create "lab9_1.py". Write a program that takes a sentence as input from the user and uses the `split()` function to split the sentence into a list of words. Print the list.
2. Create "lab9_2.py" to ask the user for a specific word. Use the `replace()` function to replace all occurrences of that word with "REPLACED". Print the modified sentence.
3. Create "lab9_3.py". Write a program that takes a string containing comma-separated values (CSV) as input and uses the `split()` function to separate the values into a list. Then, print the list.
4. Create "lab9_4.py". Write a program that takes a string as input from the user and uses the `split()` function to split the string into words. Then, use a dictionary to count the frequency of each word in the string.
5. Modify "lab9_5.py" to check for a duplicate key before saving a new item in the dictionary. In case an item is already available in the `students_dict`, then the program should warn the user.
6. Create "lab9_6.py". Write a program that takes a sentence as input and uses the `split()` function to split the sentence into words. Then, reverse the order of words in the sentence and print the modified sentence.

QUESTIONS:

Q # 1: What is the purpose of the split() function in Python?

Q # 2: Explain the difference between the replace() and split() functions in Python.

Q # 3: How can you split a string into a list of words using the split() function with a custom delimiter?

Name: _____

Roll #: _____

Date: _____

Subject Teacher

Remarks: