

ASSIGNMENT 5:

Module 6: Data Structures and Strings in Python

Task 1: Create a Dictionary of Student Marks

Problem Statement: Write a Python program that:

1. Creates a dictionary where student names are keys and their marks are values.
2. Asks the user to input a student's name.
3. Retrieves and displays the corresponding marks.
4. If the student's name is not found, display an appropriate message.

Code:

```
TuteDude Assignment 5.py > ...
1  # Task 1
2
3  students = {
4      "Ved": 85,
5      "Shlok": 92,
6      "Anuj": 78,
7      "Amresh": 95,
8      "Tejas": 88
9  }
10
11  student_name = input("Enter a student's name: ")
12
13  if student_name in students:
14      print(f"{student_name}'s marks: {students[student_name]}")
15  else:
16      print(f"Sorry, {student_name} is not found in the records.")
```

Output:

```
PS C:\Users\VG\Desktop\TuteDude Python> & C:/Users/VG/AppData/Local/Programs/Python/Python313/python.exe "c:/Users/VG/Desktop/TuteDude Python/TuteDude Assignment 5.py"
Enter a student's name: Amresh
Amresh's marks: 95
PS C:\Users\VG\Desktop\TuteDude Python>
```

Task 2: Demonstrate List Slicing

Problem Statement: Write a Python program that:

1. Creates a **list** of numbers from **1 to 10**.
2. Extracts the **first five elements** from the list.
3. Reverses these extracted elements.
4. Prints both the extracted list and the reversed list

Code:

```
18 # Task 2
19
20 numbers = list(range(1, 11))
21
22 first_five = numbers[:5]
23
24 reversed_list = first_five[::-1]
25
26 print(f"Original list: {numbers}")
27 print(f"Extracted list: {first_five}")
28 print(f"Reversed list: {reversed_list}")
```

Output:

```
PS C:\Users\VG\Desktop\TuteDude Python> & C:/Users/VG/AppData/Local/Programs/Python/Python313/python.exe "c:/Users/VG/Desktop/TuteDude Python/TuteDude Assignment 5.py"
Original list: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
Extracted list: [1, 2, 3, 4, 5]
Reversed list: [5, 4, 3, 2, 1]
PS C:\Users\VG\Desktop\TuteDude Python>
```

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