**PRACTICAL-6**

**AIM:**

**a.** Write a program to demonstrate the use of the following methods in a Tuple: i) count, ii) index

**Source Code:**

my\_tuple = (1, 2, 3, 4, 2, 5, 2)

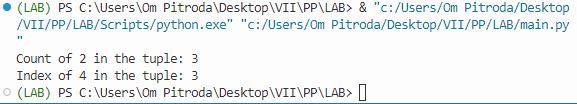
count\_of\_2 = my\_tuple.count(2)

index\_of\_4 = my\_tuple.index(4)

print("Count of 2 in the tuple:", count\_of\_2)

print("Index of 4 in the tuple:", index\_of\_4)

**Output:**



**b.** Create an empty dictionary and write a program to add single and multiple elements onto the dictionary.

**Source Code:**

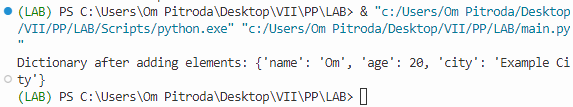
my\_dict = {}

my\_dict['name'] = 'Om'

my\_dict.update({'age': 20, 'city': 'Example City'})

print("Dictionary after adding elements:", my\_dict)

**Output:**

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**c.** Write a program demonstrating the use of following functions of the Dictionary Data Structure:

i) Operations on Dictionary: copy(), fromkeys(), get(), items(), keys(), values()

ii) Manipulating Dictionary: update(), pop(), popitem(), clear()

**Source Code:**

e sample\_dict = {'name': 'John', 'age': 25, 'city': 'Sample City'}

copy\_dict = sample\_dict.copy()

keys\_list = ['name', 'age', 'city']

default\_value = 'Not found'

new\_dict = dict.fromkeys(keys\_list, default\_value)

age = sample\_dict.get('age', 'N/A')

gender = sample\_dict.get('gender', 'N/A')

dict\_items = sample\_dict.items()

dict\_keys = sample\_dict.keys()

dict\_values = sample\_dict.values()

print("Copy of Dictionary:", copy\_dict)

print("New Dictionary with default values:", new\_dict)

print("Age from Dictionary:", age)

print("Gender from Dictionary:", gender)

print("Items in Dictionary:", dict\_items)

print("Keys in Dictionary:", dict\_keys)

print("Values in Dictionary:", dict\_values)

sample\_dict.update({'city': 'New City', 'gender': 'Male'})

age = sample\_dict.pop('age')

item = sample\_dict.popitem()

sample\_dict.clear()

print("Dictionary after updating:", sample\_dict)

print("Popped Age from Dictionary:", age)

print("Popped Item from Dictionary:", item)

print("Dictionary after clearing:", sample\_dict)

**Output:**

