EXPERIMENT-01 (b)

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AIM: To create a dictionary in python program & apply the following methods 1) Print, 2) access, 3) use get(), 4) change values, 5) use.

THEORY WITH PROGRAMS

A dictionary in python is an unordered mutable, collection that stores data in key-value pairs.

1) Create a dictionary

```
dictionary_name = {
    "key1": "value1",
    "key2": "value2",
    "key3": "Value3"
}
```

2) Print the dictionary items.

```
#creating a dictionary
student = {
    "name": "John",
    "age": 20,
    "Course": "Computer Science"
}
```

```
print("Original Dictionary:",student)
```

SAMPLE OUTPUT:

Original Dictionary: {'name': 'John', 'age': 20, 'course': 'Computer Science'}

3) Access dictionary items

```
print("Student Name:", student
      ["name"])
```

S. OUTPUT: Student Name: John

4) Use get() method
Its retrive a value for a given key.

```
print("Student Age:", student.get
      ("age"))
print("Student Grade:", student.
      get("Grade")) # key
#does not exist.
```

S. OUTPUT: Student Age: 20
Student Grade: None

5) Change dictionary values

```
student["age"] = 21
print("Updated Dictionary:", student)
```

S. OUTPUT:

Updated Dictionary: {'name': 'John', 'age': 21, 'course': 'Computer Science'}

6) Use Keys(), values() & items()

- keys(): returns all dictionary keys
- values(): returns all dictionary values.
- items(): returns key-value pairs as tuples.

```
print("Keys:", student.key())
print("Values:", student.values())
print("Items:", student.items())
```

S. OUTPUT:

Keys: dict_keys(['nam', 'age', 'course'])
Values: dict_values(['John', 21, 'Computer Science'])
Items: dict_items([('name', 'John'),

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('age', 21), ('course', 'Computer Science')]).