

```
1) t1 = (10, 20, "Python", "Code")
t2 = ("A", "B")

print("First element of t1:", t1[0])

print("Last element of t2:", t2[-1])

temp = list(t1)
temp[3] = "Program"
t1 = tuple(temp)
print("Updated t1:", t1)

a, b, c, d = t1
print("Unpacked values:", a, b, c, d)

t3 = t1 + t2
print("Joined tuple:", t3)
print("Elements from index 1 to 3:", t3[1:4])

t1 = (1, 2, 3)
print("Tuple after multiplication:", t1 * 3)
```

```
PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\task5.py"
First element of t1: 10
Last element of t2: B
Updated t1: (10, 20, 'Python', 'Program')
Unpacked values: 10 20 Python Program
Joined tuple: (10, 20, 'Python', 'Program', 'A', 'B')
Elements from index 1 to 3: (20, 'Python', 'Program')
Tuple after multiplication: (1, 2, 3, 1, 2, 3, 1, 2, 3)
```

2) my_set = {10, 20, 30, 40}

```
print(my_set)
```

```
print(20 in my_set)
```

```
print(len(my_set))
```

```
my_set.add(50)
```

```
print(my_set)
```

```
my_set.remove(30)
```

```
print(my_set)
```

```
my_set.discard(20)
```

```
print(my_set)
```

```
my_set.pop()
```

```
print(my_set)
```

```
for item in my_set:
```

```
    print(item)
```

```
my_set.clear()
```

```
print(my_set)
```

```
{10, 20, 30, 40}
True
4
{40, 10, 50, 20, 30}
{40, 10, 50, 20}
{40, 10, 50}
{10, 50}
10
50
set()
```

4) set1 = {1, 2, 3}

set2 = {3, 4, 5, 6}

```
print(set1 - set2)
```

```
print(set1 ^ set2)
```

```
set1.update(set2)
```

```
print(set1)
```

```
print(set1 | set2)
```

```
set1.add(7)
```

```
print(set1)
```

```
PS C:\Users\adnan> python -u c:\Users\adnan\Downloads\task5.py
{1, 2}
{1, 2, 4, 5, 6}
{1, 2, 3, 4, 5, 6}
{1, 2, 3, 4, 5, 6}
{1, 2, 3, 4, 5, 6, 7}
PS C:\Users\adnan>
```

```
5) student = {
```

```
    "name": "Anu",
```

```
    "age": 20,
```

```
    "course": "Python"
```

```
}
```

```
print(student.keys())
```

```
print(student.values())
```

```
print(student.items())
```

```
print(student["name"])
```

```
print(student.get("course"))
```

```
student["marks"] = 85
```

```
print(student)
```

```
student["age"] = 21
```

```
print(student)
```

```
student.pop("course")
```

```
print(student)
```

```
student.popitem()
```

```
print(student)
```

```
for key, value in student.items():
```

```
    print(key, ":", value)
```

```
PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\task5.py"
dict_keys(['name', 'age', 'course'])
dict_values(['Anu', 20, 'Python'])
dict_items([('name', 'Anu'), ('age', 20), ('course', 'Python')])
Anu
Python
{'name': 'Anu', 'age': 20, 'course': 'Python', 'marks': 85}
{'name': 'Anu', 'age': 21, 'course': 'Python', 'marks': 85}
{'name': 'Anu', 'age': 21, 'marks': 85}
{'name': 'Anu', 'age': 21}
name : Anu
age : 21
PS C:\Users\adnan>
```

```
6) students_dictionary = {
```

```
    "student1": {"name": "Anu", "age": 20},
```

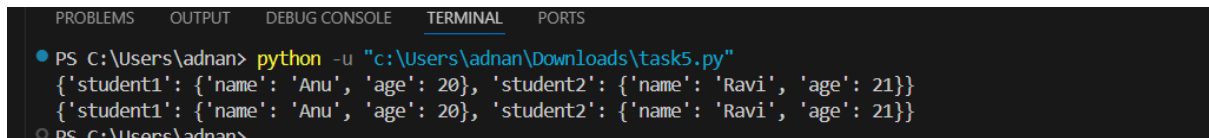
```
    "student2": {"name": "Ravi", "age": 21}
```

```
}
```

```
print(students_dictionary)
```

```
students_copied_dictionary = students_dictionary.copy()
```

```
print(students_copied_dictionary)
```



```
PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\task5.py"
{'student1': {'name': 'Anu', 'age': 20}, 'student2': {'name': 'Ravi', 'age': 21}}
{'student1': {'name': 'Anu', 'age': 20}, 'student2': {'name': 'Ravi', 'age': 21}}
PS C:\Users\adnan>
```

```
7) employee_dictionary = {
```

```
    "emp_id": 101,
```

```
    "name": "Kiran",
```

```
    "department": "HR",
```

```
    "salary": 35000
```

```
}
```

```
print(employee_dictionary.keys())
```

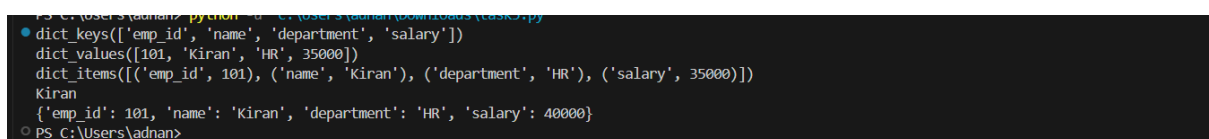
```
print(employee_dictionary.values())
```

```
print(employee_dictionary.items())
```

```
print(employee_dictionary["name"])
```

```
employee_dictionary["salary"] = 40000
```

```
print(employee_dictionary)
```



```
PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\task5.py"
dict_keys(['emp_id', 'name', 'department', 'salary'])
dict_values([101, 'Kiran', 'HR', 35000])
dict_items([('emp_id', 101), ('name', 'Kiran'), ('department', 'HR'), ('salary', 35000)])
Kiran
{'emp_id': 101, 'name': 'Kiran', 'department': 'HR', 'salary': 40000}
PS C:\Users\adnan>
```