

Practical No 6

Roll No. 2049

Q) Write a program to Perform all operations on list.

```
a = [1, 2, 3, "Vivek", "raj", 4]
```

```
b = [10, 20, "DYP", "ATU", 9]
```

```
print(a)
```

```
a.append("Yash")
```

```
print(a)
```

```
a.pop()
```

```
print(a)
```

```
a.reverse()
```

```
print(a)
```

```
a.extend(b)
```

```
print(a)
```

```
a.insert(1, 'raju')
```

```
print(a)
```

```
a.remove("raj")
```

```
print(a)
```

Output:

Output

```
[1, 2, 3, 'Vivek', 'raj', 4]
[1, 2, 3, 'Vivek', 'raj', 4, 'Yash']
[1, 2, 3, 'Vivek', 'raj', 4]
[4, 'raj', 'Vivek', 3, 2, 1]
[4, 'raj', 'Vivek', 3, 2, 1, 10, 20, 'DYP', 'ATU', 9]
[4, 'raju', 'raj', 'Vivek', 3, 2, 1, 10, 20, 'DYP', 'ATU', 9]
[4, 'raju', 'Vivek', 3, 2, 1, 10, 20, 'DYP', 'ATU', 9]
```

```
=== Code Execution Successful ===
```

Q 2) Write a program to Perform all operations on Tuple.

```
name=(23,45,2,67,3,78)
number=("vivek","yash","rohan")
count=name.count(3)
print(count)
name.index(2)
print(name)
length=len(name)
print(length)
sorted=sorted(name)
print(sorted)
maximum=max(name)
print(maximum)
minimum=min(name)
print(minimum)
concat=name+number
print(concat)
replicate=name*3
print(replicate)
```

Output:

```
= RESTART: C:/Users/DYP/Desktop/python program/tuple.py
1
(23, 45, 2, 67, 3, 78)
6
[2, 3, 23, 45, 67, 78]
78
2
(23, 45, 2, 67, 3, 78, 'vivek', 'yash', 'rohan')
(23, 45, 2, 67, 3, 78, 23, 45, 2, 67, 3, 78, 23, 45, 2, 67, 3, 78)
|
```

Q 3) Write a program to Perform all operations on Set.

```
E = {0, 2, 4, 6, 8};
N = {1, 2, 3, 4, 5};
set1={"apple","Banana","chery"}
print("Union of E and N is",E | N)
print("Intersection of E and N is",E & N)
print("Difference of E and N is",E - N)
print("Symmetric difference of E and N is",E ^ N)
set1.add("Orange")
print(set1)
set1.pop()
print(set1)
set1.remove("apple")
print(set1)
```

Output:

```
= RESTART: C:/Users/DYP/Desktop/python program/tuple.py
Union of E and N is {0, 1, 2, 3, 4, 5, 6, 8}
Intersection of E and N is {2, 4}
Difference of E and N is {0, 8, 6}
Symmetric difference of E and N is {0, 1, 3, 5, 6, 8}
{'chery', 'apple', 'Orange', 'Banana'}
{'apple', 'Orange', 'Banana'}
{'Orange', 'Banana'}
|
```

Q 4) Write a program to Perform all operations on Dictionary.

```
dict={1:"apple",2:"Banana",3:"chery"}
get=dict.get(2)
print(get)
items=dict.items()
print(items)
keys=dict.keys()
print(keys)
values=dict.values()
print(values)
popitem=dict.popitem()
print(popitem)
```

Output:

```
===== RESTART: C:/Users/DYP/Desktop/python program/1
Banana
dict_items([(1, 'apple'), (2, 'Banana'), (3, 'chery')])
dict_keys([1, 2, 3])
dict_values(['apple', 'Banana', 'chery'])
(3, 'chery')
|
```