Topic :List

Exercise

Q1. Create a list of 5 random numbers and print the list.

```
numbers = [12, 45, 67, 23, 89]
print(f"List:{numbers}")
```

```
List:[12, 45, 67, 23, 89]
```

Q2. Insert 3 new values to the list and print the updated list.

```
numbers.extend([34, 78, 56])
```

```
List:[12, 45, 67, 23, 89]
Updated List: [12, 45, 67, 23, 89, 34, 78, 56]
```

Q3. Try to use a for loop to print each element in the list.

```
for num in numbers:
    print(num)
```

```
12
45
67
23
89
34
78
56
```

Topic: Dictionary

Exercise

Q1. Create a dictionary with keys 'name', 'age', and 'address' and values 'John', 25, and 'New York' respectively.

```
person_info = {
    'name': 'John',
    'age': 25,
    'address': 'New York'
}
print(person_info)
```

```
{'name': 'John', 'age': 25, 'address': 'New York'}
```

Q2. Add a new key-value pair to the dictionary created in Q1 with key 'phone' and value '1234567890'.

```
{'name': 'John', 'age': 25, 'address': 'New York', 'phone': '1234567890'}
```

Topic: Set

Exercise

Q1.Create a set with values 1, 2, 3, 4, and 5.

```
num_set = {1, 2, 3, 4, 5}
print(num_set)
```

```
{1, 2, 3, 4, 5}
```

Q2. Add the value 6 to the set created in Q1.

```
num_set.add(6)
print(num_set)
```

```
{1, 2, 3, 4, 5, 6}
```

Q3. Remove the value 3 from the set created in Q1.

```
num_set.discard(3)
print(num_set)
```

```
{1, 2, 4, 5, 6}
```

Topic:Tuple

Exercise

Q1. Create a tuple with values 1, 2, 3, and 4

```
num_tuple = (1, 2, 3, 4)
print(num_tuple)
```

```
(1, 2, 3, 4)
```

Q2. Print the length of the tuple created in Q1.

```
print("Length of tuple:", len(num_tuple))
```

```
Length of tuple: 4
```