Python Assignment 2

Lists:

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

```
random_numbers=[1,2,3,4,5]
print(type(random_numbers),random_numbers)
```

Output:

```
C:\Users\jayak\PycharmProjects\entri
<class 'list'> [1, 2, 3, 4, 5]

Process finished with exit code 0
```

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

```
random_numbers.extend([6,7,8])
print(random_numbers,type(random_numbers))
```

Output:

```
C:\Users\jayak\PycharmProjects\entri_d41_p
<class 'list'> [1, 2, 3, 4, 5]
[1, 2, 3, 4, 5, 6, 7, 8] <class 'list'>

Process finished with exit code 0
```

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

```
print("Elements in the list:")
for number in random_numbers:
    print(number)
```

```
Elements in the list:
1
2
3
4
5
6
```

Dictionary:

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

```
Details={"name":"John","Age":25,"Address":"New York"}
print(Details,type(Details))
```

Output:

```
C:\Users\jayak\PycharmProjects\entri_d41_python_project\.venv\Scri
{'name': 'John', 'Age': 25, 'Address': 'New York'} <class 'dict'>

Process finished with exit code 0
```

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

Details["Phone"]=1234567890

print(Details,type(Details))

Output:

```
C:\Users\jayak\PycharmProjects\entri_d41_python_project\.venv\Scripts\python.exe C:\Us
{'name': 'John', 'Age': 25, 'Address': 'New York'} <class 'dict'>
{'name': 'John', 'Age': 25, 'Address': 'New York', 'Phone': 1234567890} <class 'dict'>

Process finished with exit code 0
```

Set:

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

Set_1={1,2,3,4,5}

print(Set_1,type(Set_1))

Output:

```
C:\Users\jayak\PycharmProjects\ent
{1, 2, 3, 4, 5} <class 'set'>

Process finished with exit code 0
```

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

Set_1.add(6)

print(Set_1,type(Set_1))

Output:

```
C:\Users\jayak\PycharmProjects\entr
{1, 2, 3, 4, 5} <class 'set'>
{1, 2, 3, 4, 5, 6} <class 'set'>

Process finished with exit code 0
```

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

Set_1.remove(3)

print(Set_1,type(Set_1))

Output:

```
C:\Users\jayak\PycharmProjects\en
{1, 2, 3, 4, 5} <class 'set'>
{1, 2, 3, 4, 5, 6} <class 'set'>
{1, 2, 4, 5, 6} <class 'set'>
```

Tuple:

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

Tuple_1=1,2,3,4

print(Tuple_1,type(Tuple_1))

Output:

```
C:\Users\jayak\PycharmProjects
(1, 2, 3, 4) <class 'tuple'>
```

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

```
print(len(Tuple_1))
```

Output: