List Exercise

Create a list of 5 random numbers and print the list
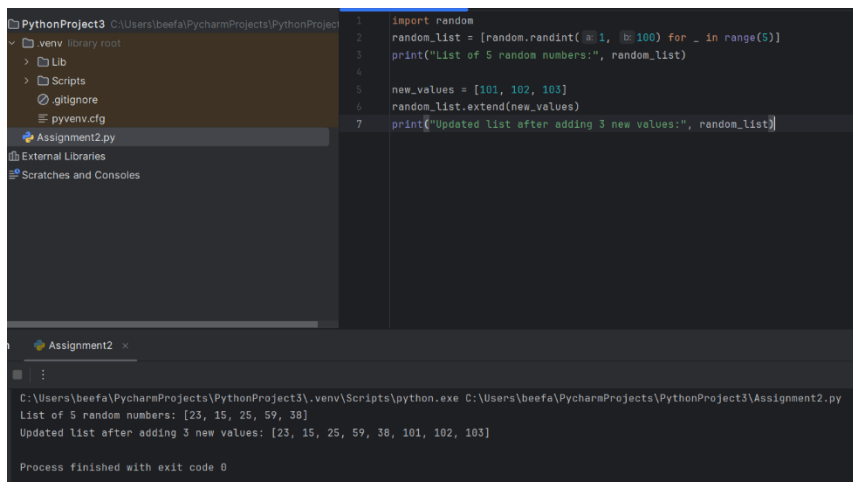


```python
import random
random_list = [random.randint(a: 1, b: 100) for _ in range(5)]
print("List of 5 random numbers:", random_list)
```

```
C:\Users\beefa\PycharmProjects\PythonProject3\.venv\Scripts\python.exe C:\Users\beefa\PycharmProjects\PythonProject3\Assignment2.py
List of 5 random numbers: [76, 14, 52, 29, 43]

Process finished with exit code 0
```

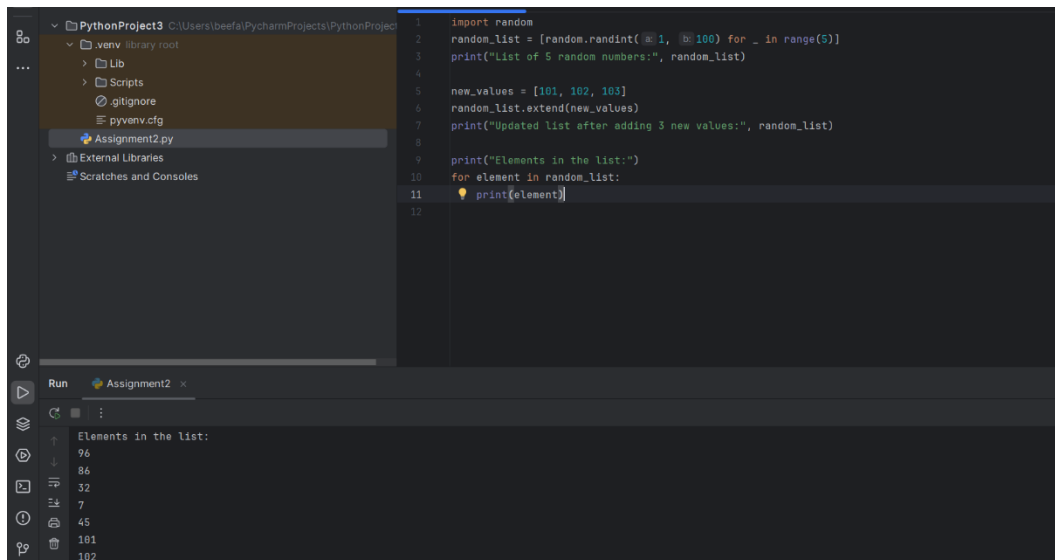**Insert 3 new values to the list and print the updated list**


```python
import random
random_list = [random.randint(a: 1, b: 100) for _ in range(5)]
print("List of 5 random numbers:", random_list)

new_values = [101, 102, 103]
random_list.extend(new_values)
print("Updated list after adding 3 new values:", random_list)
```

```
C:\Users\beefa\PycharmProjects\PythonProject3\.venv\Scripts\python.exe C:\Users\beefa\PycharmProjects\PythonProject3\Assignment2.py
List of 5 random numbers: [23, 15, 25, 59, 38]
Updated list after adding 3 new values: [23, 15, 25, 59, 38, 101, 102, 103]

Process finished with exit code 0
```

Use a for loop to print each element in the list

Dictionary

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

Add a new key-value pair to the dictionary with key 'phone' and value '1234567890'

```
5    new_values = [101, 102, 103]
6    random_list.extend(new_values)
7    print("Updated list after adding 3 new values:", rand
8
9    print("Elements in the list:")
10   for element in random_list:
11       print(element)
12
13       person = {
14           "name": "John",
15           "age": 25,
16           "address": "New York"
17       }
18       print("\nDictionary:", person)
19
20       person["phone"] = "1234567890"
21       print("Updated dictionary:", person)
22
23
```
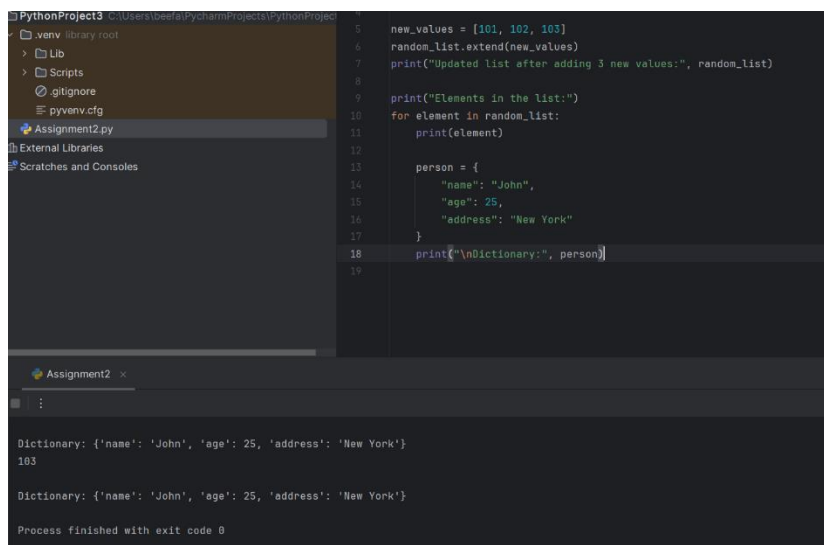
```
Assignment2 ×

Updated dictionary: {'name': 'John', 'age': 25, 'address': 'New York', 'phone': '1234567890'}
103

Dictionary: {'name': 'John', 'age': 25, 'address': 'New York'}
Updated dictionary: {'name': 'John', 'age': 25, 'address': 'New York', 'phone': '1234567890'}

Process finished with exit code 0
```

Set

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


```
7    print("Updated list after adding 3 new values:", random_list)
8
9    print("Elements in the list:")
10   for element in random_list:
11       print(element)
12
13       person = {
14           "name": "John",
15           "age": 25,
16           "address": "New York"
17       }
18       print("\nDictionary:", person)
19
20       person["phone"] = "1234567890"
21       print("Updated dictionary:", person)
22
23       my_set = {1, 2, 3, 4, 5}
24       print("\nSet:", my_set)
25
26
```
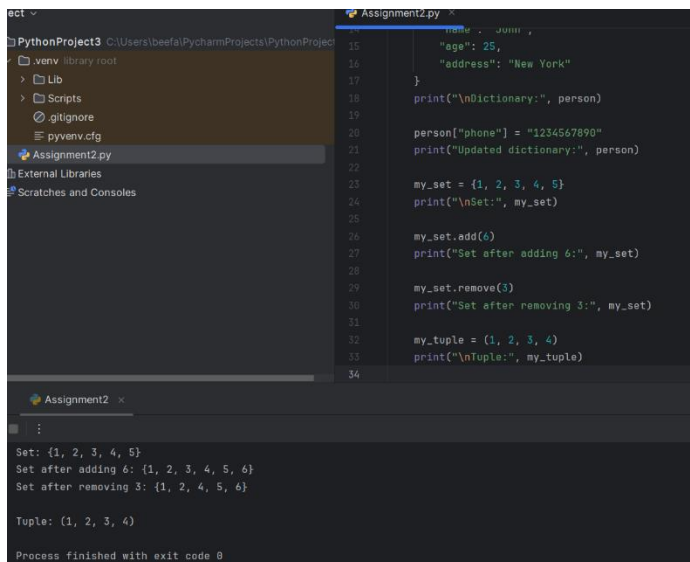
```
Assignment2 ×

Dictionary: {'name': 'John', 'age': 25, 'address': 'New York'}
Updated dictionary: {'name': 'John', 'age': 25, 'address': 'New York', 'phone': '1234567890'}

Set: {1, 2, 3, 4, 5}

Process finished with exit code 0
```

Add the value 6 to the set

Remove the value 3 from the set

Tuple

Create a tuple with values 1, 2, 3, and 4
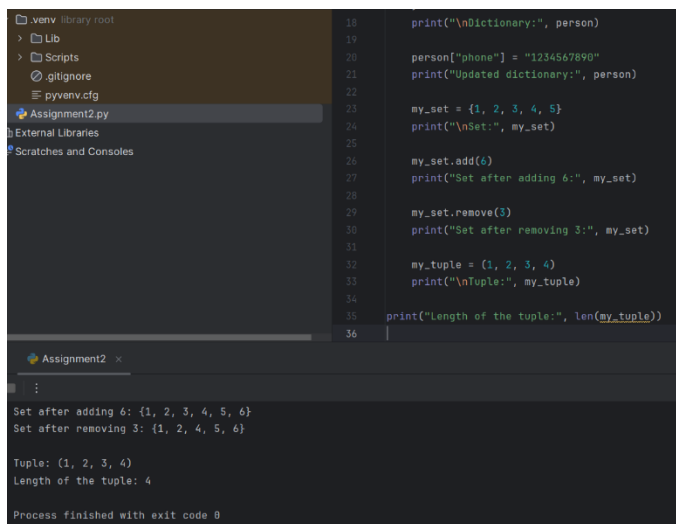
Print the length of the tuple