

✓ Topic : Dictionary Exercise

```
# Creating the dictionary
person_dict = {'name': 'John', 'age': 25, 'address': 'New York'}
print("Original dictionary:", person_dict)
```

```
Original dictionary: {'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'.

```
# Adding a new key-value pair to the dictionary
person_dict['phone'] = '1234567890'
print("Updated dictionary:", person_dict)
```

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

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Data_Structures_in_python.ipynb ☆

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▼ List Exercise

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[1] #Q1. Create a list of 5 random numbers and print the list.

```
import random

# Creating a list of 5 random numbers
random_list = [random.randint(1, 100) for i in range(5)]
print("Original list:", random_list)
```

Original list: [54, 4, 41, 63, 71]

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[2] #Q2. Insert 3 new values to the list and print the updated list.

```
# Inserting 3 new values to the list
random_list.extend([10, 20, 30])
print("Updated list:", random_list)
```

Updated list: [54, 4, 41, 63, 71, 10, 20, 30]

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

```
# Using a for loop to print each element in the list
for element in random_list:
    print(element)
```

54
4
41
63
71
10
20
30

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▼ Topic : Set Exercise

✓ [12] #Q1. Create a set with values 1, 2, 3, 4, and 5.

```
# Creating the set
num_set = {1, 2, 3, 4, 5}
print("Original set:", num_set)
```

Original set: {1, 2, 3, 4, 5}

✓ [13] #Q2. Add the value 6 to the set created in Q1.

```
# Adding value 6 to the set
num_set.add(6)
print("Set after adding 6:", num_set)
```

Set after adding 6: {1, 2, 3, 4, 5, 6}

✓ [14] #Q3. Remove the value 3 from the set created in Q1.

```
# Removing value 3 from the set
num_set.discard(3)
print("Set after removing 3:", num_set)
```

Set after removing 3: {1, 2, 4, 5, 6}

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Topic : Tuple Exercise

✓ 0s [15] #Q1. Create a tuple with values 1, 2, 3, and 4.

```
# Creating the tuple
num_tuple = (1, 2, 3, 4)
print("Tuple:", num_tuple)
```

↗ Tuple: (1, 2, 3, 4)

✓ 0s #Q2. Print the length of the tuple created in Q1.

```
# Printing the length of the tuple
print("Length of the tuple:", len(num_tuple))
```

↗ Length of the tuple: 4