DATA ANALYTICS WITH PYTHON

TASK-1

Description: This task involves understanding the basic data types in Python such as lists, dictionaries, and sets.

Responsibility: Write a Python program to create a list, a dictionary, and a set. Perform basic operations like adding, removing, and modifying elements.

```python
#basic task like adding removing and modifying list

# Create a list
my_list = [1, 2, 3, 4, 5]

# Add an element to the end of the list
my_list.append(6)

# Remove the last element from the list
my_list.pop()

# Modify the first element of the list
my_list[0] = 0

# Print the modified list
print(my_list)
```

    [0, 2, 3, 4, 5]

```python
# basic task like adding removing and modifying dictionary

# Create a dictionary
my_dict = {"name": "John", "age": 30, "city": "New York"}

# Add a new key-value pair to the dictionary
my_dict["profession"] = "Software Engineer"

# Remove a key-value pair from the dictionary
del my_dict["age"]

# Modify the value of an existing key
my_dict["city"] = "London"

# Print the modified dictionary
print(my_dict)
```

    {'name': 'John', 'city': 'London', 'profession': 'Software Engineer'}

```python
#  basic task like adding removing and modifying set

# basic task like adding removing and modifying set

# Create a set
my_set = {1, 2, 3, 4, 5}

# Add an element to the set
my_set.add(6)

# Remove an element from the set
my_set.remove(3)

# Modify an element in the set (not possible directly)
# To modify an element, we need to remove it and add a new one
my_set.remove(1)
my_set.add(0)

# Print the modified set
print(my_set)
```

```
{0, 2, 4, 5, 6}
```