main.py

Share Run

```python
# Create a list
my_list = [1, 2, 3]
print("Initial List:", my_list)

# Add an element to the list
my_list.append(4)
print("After Adding to List:", my_list)

# Remove an element from the list
my_list.remove(2)
print("After Removing from List:", my_list)

# Modify an element in the list
my_list[1] = 99
print("After Modifying List:", my_list)

# Create a dictionary
my_dict = {"a": 1, "b": 2, "c": 3}
print("\nInitial Dictionary:", my_dict)

# Add a key-value pair to the dictionary
my_dict["d"] = 4
print("After Adding to Dictionary:", my_dict)

# Remove a key-value pair from the dictionary
my_dict.pop("b")
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my_dict.pop("b")
print("After Removing from Dictionary:", my_dict)

# Modify a value in the dictionary
my_dict["a"] = 100
print("After Modifying Dictionary:", my_dict)

# Create a set
my_set = {1, 2, 3}
print("\nInitial Set:", my_set)

# Add an element to the set
my_set.add(4)
print("After Adding to Set:", my_set)

# Remove an element from the set
my_set.remove(2)
print("After Removing from Set:", my_set)

# Modify elements in the set (convert to a list, modify, and convert back)
# Note: Sets are unordered and do not support indexing directly
my_set = set([x * 2 for x in my_set])
print("After Modifying Set:", my_set)

```

Output

Clear

```
Initial List: [1, 2, 3]
After Adding to List: [1, 2, 3, 4]
After Removing from List: [1, 3, 4]
After Modifying List: [1, 99, 4]

Initial Dictionary: {'a': 1, 'b': 2, 'c': 3}
After Adding to Dictionary: {'a': 1, 'b': 2, 'c': 3, 'd': 4}
After Removing from Dictionary: {'a': 1, 'c': 3, 'd': 4}
After Modifying Dictionary: {'a': 100, 'c': 3, 'd': 4}

Initial Set: {1, 2, 3}
After Adding to Set: {1, 2, 3, 4}
After Removing from Set: {1, 3, 4}
After Modifying Set: {8, 2, 6}

=== Code Execution Successful ===
```