1. Python Program to Find LCM

```
python
Copy code
def find_lcm(x, y):
    greater = max(x, y)
    while True:
        if greater % x == 0 and greater % y == 0:
            return greater
        greater += 1

print("LCM of 4 and 6:", find_lcm(4, 6))
```

---

2. Python Program to Make a Simple Calculator

```
python
Copy code
def calculator(a, b, op):
    if op == '+':
        return a + b
    elif op == '-':
        return a - b
    elif op == '*':
        return a * b
    elif op == '/':
        return a / b

print("Result:", calculator(10, 5, '+'))
```

---

3. Program to Merge Two Lists

```
python
Copy code
list1 = [1, 2, 3]
list2 = [4, 5, 6]
merged_list = list1 + list2
print("Merged List:", merged_list)
```

---

4. Demonstrate the Difference Between List and Tuple

```
python
Copy code
my_list = [1, 2, 3]  # Mutable
my_tuple = (1, 2, 3)  # Immutable

my_list[0] = 10  # Allowed
print("Modified List:", my_list)

# my_tuple[0] = 10  # Not allowed, uncomment to see the error
print("Tuple remains unchanged:", my_tuple)
```

---

5. Try the Following on Tuple

```
python
Copy code
my_tuple = (1, 2, 3)
print("First element:", my_tuple[0])
print("Slice:", my_tuple[1:])
```

---

6. Demonstrate the Following

```
python
Copy code
# This question seems incomplete; please clarify what needs to be demonstrated.
```

---

7. Demonstrate the Following on Dictionary

```
python
Copy code
my_dict = {"a": 1, "b": 2}
print("Value of 'a':", my_dict["a"])
my_dict["c"] = 3  # Adding new key-value
print("Updated Dictionary:", my_dict)
```

---

8. Perform Positive Indexing, Slicing, Negative Indexing on Lists

```
python
Copy code
my_list = [10, 20, 30, 40]
print("Positive Indexing:", my_list[1])  # 20
print("Slicing:", my_list[1:3])  # [20, 30]
print("Negative Indexing:", my_list[-1])  # 40
```

---

9. Program to Find the Second Largest and Second Smallest in a 1D Array

```
python
Copy code
array = [10, 20, 30, 40]
array.sort()
print("Second Smallest:", array[1])
print("Second Largest:", array[-2])
```

---

10. Accept a Number and Display if it is Odd or Even

```
python
Copy code
num = int(input("Enter a number: "))
if num % 2 == 0: print("Even")  # One-liner with if
```