Conditional Execution (`if`, `elif`, `else`)

```python
x = 10

if x > 10:
    print("x is greater than 10")
elif x == 10:
    print("x is equal to 10")
else:
    print("x is less than 10")
```

```
C:\Users\jsuma\PycharmProjects\LMS\.venv\Scripts\python.exe C:\Users\jsuma\PycharmProjects\LMS\ifcomdition.py
x is equal to 10

Process finished with exit code 0
```

Looping Statements (`for`, `while`):

```python
# Iterate over a sequence
numbers = [1, 2, 3, 4, 5]

for num in numbers:
    print(num)

# Iterate over a range
for i in range(5):
    print(i)

# Iterate over dictionary
person = {'name': 'Alice', 'age': 30}

for key, value in person.items():
    print(key, value)
```

```
C:\Users\jsuma\PycharmProjects\LMS\.venv\Scripts\python.exe C:\Users\jsuma\PycharmProjects\LMS\ifcomdition.py
1
2
3
4
5
0
1
2
3
4
name Alice
age 30

Process finished with exit code 0
```

Loop Control Statements

```python
for i in range(10):
    if i == 3:
```

```
        continue   # Skip printing 3
    elif i == 7:
        break   # Terminate the loop when i becomes 7
    else:
        pass   # Do nothing for other values of i
    print(i)
```

```
C:\Users\jsuma\PycharmProjects\LMS\.venv\Scripts\python.exe C:\Users\jsuma\PycharmProjects\LMS\ifcomdition.py
0
1
2
4
5
6

Process finished with exit code 0
```