

COMP110: Conditionals and Booleans

Conditional statements allow you to control the flow of a program.

1. if Statement

```
x = 10
```

```
if x > 0:
```

```
    print("Positive number")
```

2. if-else Statement

```
x = -5
```

```
if x > 0:
```

```
    print("Positive")
```

```
else:
```

```
    print("Non-positive")
```

3. if-elif-else Chain

```
score = 85
```

```
if score >= 90:
```

```
    print("Grade: A")
```

```
elif score >= 80:
```

```
    print("Grade: B")
```

```
elif score >= 70:
```

```
    print("Grade: C")
```

```
else:
```

```
    print("Grade: F")
```

4. Logical Operators

a = True

b = False

if a and not b:

 print("a is True and b is False")

5. Comparison Operators

==, !=, <, >, <=, >=

These are used in condition checks.