

Control Statements in Python:

- Python normally executes code **line by line, top to bottom**.
- But in real life, we need **decisions and repetition**.
- For this, we use **control statements**.

Types of Control Statements:

- **Conditional Statements** → if, if-else, if-elif-else
- **Looping Statements** → while, for
- **Jump Statements** → break, continue, pass

Conditional Statements – If & If-Else:

Conditional statements help us **make decisions**.

1. If Statement

- Runs a block of code **only if the condition is True**.

Syntax:

```
if condition:
```

```
    # code block
```

Example:

```
age = 20
```

```
if age >= 18:
```

```
    print("You can vote")
```

2. If-Else Statement

- Runs one block of code if the condition is True.
- Otherwise runs the **else** block.

Syntax:

```
if condition:
```

```
    # code block if True
```

```
else:
```

```
    # code block if False
```

Example:

```
age = 16
```

```
if age >= 18:
```

```
    print("You can vote")
```

```
else:
```

```
    print("You cannot vote")
```

Importance of If-Else:

- **Decision Making** in programs.
- Without conditions, programs cannot behave differently in different situations.

Real Life Examples:

- If marks $\geq 50 \rightarrow$ Pass, else Fail.
- If password correct \rightarrow Login, else Error.
- If stock available \rightarrow Place Order, else Show "Out of Stock".