

## If-Elif Statement:

- **If-Elif** is used when we want to check **multiple conditions** one by one.
- Only the **first True condition** will run, and the rest are skipped.
- Elif stands for **Else If**.

### Syntax:

```
if condition1:  
    # code if condition1 is True  
elif condition2:  
    # code if condition2 is True  
elif condition3:  
    # code if condition3 is True  
else:  
    # code if all conditions are False
```

### Importance of If-Elif:

- Helps handle **multiple choices**.
- Instead of writing many **if-else** blocks, we use **if-elif-else** for cleaner code.
- Commonly used in grading systems, menus, billing systems, etc.

## Nested If Statement:

- A **Nested If** means using one if statement **inside another if**.
- It is used when one condition depends on another.

### Syntax:

```
if condition1:  
    if condition2:  
        # code if both conditions are True  
    else:  
        # code if condition1 is True but condition2 is False  
else:  
    # code if condition1 is False
```

## Nested If-Elif Statement:

- A **Nested If-Elif** is when we use **if-elif-else** inside another **if** block.
- Useful when **multiple conditions** depend on a primary condition.

### Syntax:

```
if main_condition:

    if sub_condition1:

        # code for sub-condition1

    elif sub_condition2:

        # code for sub-condition2

    else:

        # code if all sub-conditions are False

else:

    # code if main_condition is False
```

### Importance of Nested If-Elif:

- Used when a **main condition** has **multiple sub-conditions**.
- Real life use cases:
  - ◆ If user logged in → check if they are admin, teacher, or student.
  - ◆ If product available → check if payment is card, cash, or digital wallet.