

## **Python Useful Functions With Examples**

### **1. print() - Display output**

Example: `print("Hello")`

### **2. input() - Take user input**

Example: `name = input("Enter name:")`

### **3. len() - Length of string/list**

Example: `len("Awais")`

### **4. type() - Show data type**

Example: `type(10)`

### **5. range() - Generate number sequence**

Example: `for i in range(5): print(i)`

### **6. int(), float(), str() - Convert types**

Example: `age = int("25")`

### **7. max(), min() - Largest / smallest value**

Example: `max([4, 2, 9])`

### **8. sum() - Sum of list values**

Example: `sum([10, 20, 30])`

### **9. sorted() - Sort a list**

Example: `sorted([3, 1, 2])`

### **10. abs() - Absolute value**

Example: `abs(-5)`

## **11. round()** - Round numbers

Example: `round(3.14159, 2)`

## **12. enumerate()** - Index + value in loop

Example: `for i, v in enumerate(['a', 'b']): print(i, v)`

## **13. map()** - Apply function to all elements

Example: `list(map(lambda x: x*2, [1,2,3]))`

## **14. filter()** - Filter values

Example: `list(filter(lambda x: x%2==0, [1,2,3,4]))`

## **15. zip()** - Combine lists

Example: `list(zip(['Ali', 'Awais'], [90, 85]))`

## **String Functions**

`upper()` - "hi".upper()

`lower()` - "HI".lower()

`split()` - "a b c".split()

`join()` - "-".join(["a", "b"])

`replace()` - "hello".replace("h", "H")