

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")`