- *loops: in the python are used to execute a block of code repeatedly until certain condition is met,
- python mainly provide 2 loop
- 1)for loop
- 2)while loop
- 3)nested loop
- *for loop inside for loop
- * for loop inside while loop
- *while loop inside while loop
- *while loop inside for loop

- 1)for loop
- for loop with sequence:
- syntax
- for variable in sequence
- statements
- string, list, tuples, set, dict,
- sub="python"
- •
- 2)for loop with range() function
- for variable in range():
- statements

- Range
- there are 2 standard words r in python in loops also
- •
- 1)intalation(start value)
- 2)condition(stop value)less than one value
- 3)incrementation/decrement ion(steps size) +
- •
- *we have default start value is 0
- default step value is 1
- •
- range(1,11,1)
- (i=1;i<11,i+1)
- i=1,2,3,4,5,6,7,8,9,10
- •
- range(1,10,1)
- (i=1;i<10,i+1)
- i=1,2,3,4,5,6,7,8,9

• 1. for loop → used to iterate over sequences (string, list, tuple, set, dict) or a range of numbers.

• 2. while loop → used when we don't know the exact number of iterations and continue until a condition becomes false.

- Nested loops allow placing one loop inside another (for-for, for-while, while-while, while-for).
- The range() function is commonly used with for loops.
- Range(start, stop, step)
- Default values: start = 0, step = 1
- Example: range(1, 11, 1) \rightarrow generates numbers 1 to 10.