Day-02 -> 20/11/2025

Applications

1) Web applications
2) Mobile apps
3) Desktop Apps
4) Gaming
5) IOT
6) Cyber Security
7) Data Science and AI
8) Data Analysis
9) Automation

=> Comments
=> Key words
=> Data types
=> input / output statements
=> Variables
=> Conditional statements
=> Loops
=> Functions
=> Data structure (list, tuple, set, dict)
=> File handling
=> Error and exception handling

a) Single (Primitive) data type in Python
It's a basic data types hold a single value.

1. int (integer) age = 20
2. float (Decimal) Pi = 3.14
3. Str (String) name = "Chandana"
4. Bool (Boolean) is_student = true
5. None type x = None

b) Multiple (Collection) data types in python.
It stores a multiple values together.

1. list (ordered, unordered) marks = [85, 90, 100]
2. tuple (ordered, not chage) colors = ("Red", "blue")
3. Set (unordered, unique) unique_no = {1, 2, 3, 3, 4}
4. dict (dictionary) student = {
"name": "Ajay",
"age": "22",
}

Operators

Q1) What is operators? Give example?
=> Operators is a symbol that performs an operation on values & variables
Ex: a + 5 operands
↓
operator

Types of operators:

1) Arithmetic operator
2) Assignment operator

03) Comparison operator
04) Logical operator
06) Bitwise operator
06) Membership operator
07) Identity operator

01) Arithmetic operators
↓
It is used to perform a mathematic calculations
+ , — , * , % , / , // , **

Example problem 02
Write a program to perform basic calculator operation using 2 values, take input from user

=> a = float (input ("enter the value of a:"))
b = float (input ("enter the value of b:"))

print ("Addition:", a+b)
Print ("Sub:", a-b)
Print ("Division:", a/b)
Print ("Multiplication:", a*b)
Print ("Moduls:", a%b)

Output:

enter the value of a: 100
enter the value of b: 90
Addition : 190.0
Sub : 10.0
Division : 1.1111
Multiplication: 9000.0
Moduls: 10.0