Q4. Different type of operators in Python and their uses.

Operators are special symbols or keywords that are used to carry out specific actions on numbers or variables in Python expressions.

Python supports various types of operators, including arithmetic operators (+, -, \*, /), comparison operators (==, !=, <, >), logical operators (and, or, not), assignment operators (=, +=, -=, \*=, /=), etc. Operators have precedence and associativity rules that determine the order of evaluation in expressions.

Types of operators in python -  
**1. Arithmetic Operators**

These operators perform basic mathematical operations, example - ‘+’,’-’,’\*’,’/’,’%’ etc

### **2. Comparison Operators**

These operators compare two values and return a Boolean result. Example - ‘==’,=>,<=,<,>,!= etc.

### **3. Assignment Operators**

These operators are used to assign values to variables. Examples - =,+=,-=,*=,/=,//=,*\*\*= etc.

### **4. Logical Operators**

These operators are used to combine conditional statements. Examples - and, or, not

### **5. Bitwise Operators Example**

These operators work on the binary (bit) representation of integers. Example - ||, &, ^, ~, >>, <<

### **6. Membership Operators and Identity Operators -**

Membership operators test for membership in a sequence (like strings, lists, or tuples). And Identity operators are used to compare the memory locations of two objects.