



# WELCOME



# AGENDA

Arithmetic Operators Examples

Precedence and Associativity of Python Arithmetic Operators



# ARITHMETIC OPERATOR

Operator	Name
+	Addition
-	Subtraction
*	Multiplication
/	Division
%	Modulus
**	Exponent
//	Floor Division



# ADDITION OPERATOR (+)

- Addition of Two Integers
- Addition of Integer and Float Numbers
- Addition of Float and Complex Numbers



# SUBTRACTION OPERATOR (-)

- Subtraction of Two Integers
- Subtraction of Integer and Float Numbers
- Subtraction of Float and Complex Numbers



# MULTIPLICATION OPERATOR (\*)

- Multiplication of Two Integers
- Multiplication of Integer with Float Numbers
- Multiplication of Float with Complex Numbers



# DIVISION OPERATOR (/)

- Division of Two Integers
- Division of Integer with Float Numbers
- Division of Float with Complex Numbers
- Zero Division Error



# MODULUS (REMAINDER) OPERATOR (%)

- Modulus (mod) of Two Integers
- Modulus (mod) of Integer with Float Numbers
- Modulus (mod) of Float with Complex Numbers -> **NOT POSSIBLE**





# EXPONENT (RAISED TO) OPERATOR (\*\*)

- Exponent of Two Integers
- Exponent of Integer with Float Numbers



# FLOOR DIVISION OPERATOR (//)

- Division of Two Positive Integers
- Division of Two Negative Integers
- Division of Integer with Float Numbers



# Precedence of Python Arithmetic Operators

- Operator precedence determines the order in which operations are performed in an expression.
- In Python, arithmetic operators have the following precedence, from highest to lowest:
  1. `**` (Exponentiation)
  2. `*`, `/`, `//`, `%` (Multiplication, Division, Floor Division, Modulus)
  3. `+`, `-` (Addition, Subtraction)



# Associativity of Python Arithmetic Operators

- Associativity determines the order in which operations of the same precedence are performed.
- In Python, most arithmetic operators are left-associative, meaning they are evaluated from left to right.
- However, the exponentiation operator `**` is right-associative, meaning it is evaluated from right to left.



# Precedence and Associativity of Python Arithmetic Operators

Operator	Precedence	Associativity
**	1	Right To Left
*, /, //, %	2	Left To Right
+, -	3	Left To Right



# Bitwise Operators