21 May

Python Basic - 2

Q.1. Create two int type variables, apply addition, subtraction, division and multiplications and store the results in variables. Then print the data in the following format by calling the variables:

First variable is \_\_ & second variable is \_\_.

Addition: \_\_ + \_\_ = \_\_

Subtraction: \_\_ - \_\_ = \_\_

Multiplication: \_\_ \* \_\_ = \_\_

Division: \_\_ / \_\_ = \_\_

Code

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num1 = 10

num2 = 5

addition = num1 + num2

subtraction = num1 - num2

multiplication = num1 \* num2

division = num1 / num2

print("First variable is", num1, "& second variable is", num2)

print("Addition:", num1, "+", num2, "=", addition)

print("Subtraction:", num1, "-", num2, "=", subtraction)

print("Multiplication:", num1, "\*", num2, "=", multiplication)

print("Division:", num1, "/", num2, "=", division)

Q.2. What is the difference between the following operators:

(i) ‘/’ & ‘//’

/ is the division operator in Python. It performs regular division and returns the exact quotient as a floating-point number. Ex - 9/2=4.5

// is the floor division operator in Python. It performs division and returns the floor of the quotient. Ex- 9//2 =4

(ii) ‘\*\*’ & ‘^’

\*\* is the exponentiation operator in Python. It raises the left operand to the power of the right operand. Ex - 2\*\*3=8

^ is not an exponentiation operator in Python. Instead, it is the bitwise XOR operator, used for performing bitwise XOR (exclusive OR) operation between two integers. Ex - 5 ^ 3 =6

Q.3. List the logical operators.

and, or, not

Q.4. Explain right shift operator and left shift operator with examples.

The right shift operator (>>) shifts the bits of a number to the right by a specified number of positions. Ex-12>>2 =3

The left shift operator (<<) shifts the bits of a number to the left by a specified number of positions. Ex-12>>=48

Q.5. Create a list containing int type data of length 15. Then write a code to check if 10 is present in the list or not.

my\_list = [5, 3, 8, 12, 6, 10, 7, 2, 9, 14, 1, 4, 11, 13, 15]

if 10 in my\_list:

print("10 is present in the list.")

else:

print("10 is not present in the list.")