Topics: Variables, Data Types & Operators

Dear Students,

This assignment will help you practice the basics of Python. Please attempt all questions.

Q1: Variables & Data Types

- 1. Create the following variables:
 - \circ name \rightarrow your full name
 - \circ age \rightarrow your age
 - o is_student → a boolean value (True/False)
- 2. Print all variables in one line.
- 3. Print the data type of each variable using type().

Q2: Arithmetic Operators

Let x = 20 and y = 6.

Perform and print the results of:

- Addition
- Subtraction
- Multiplication
- Division

- Floor Division
- Modulus
- Exponent

Q3: Assignment Operators

```
Let num = 10.
```

- 1. Add 5 to num using the += operator.
- 2. Multiply num by 2 using the *= operator.
- 3. Subtract 4 from num using the -= operator.
- 4. Print the final value of num.

Q4: Comparison Operators

```
Take a = 15 and b = 12.
```

Check and print the results of the following comparisons:

- a > b
- a < b
- a == b
- a != b
- a >= b
- a <= b

Q5: Logical Operators

Let p = True and q = False. Check and print the result of:

- p and q
- p or q
- not p
- not q

Q6: Real-Life Example

The price of one notebook is 80 rupees.

- If you buy **7 notebooks**, calculate the total price.
- If you have **600 rupees**, check (using comparison operator) whether your money is enough to buy them or not.
- Print the result in a clear message.

Q7: Bonus (Optional)

Take two numbers as input from the user.

- Print their sum.
- Print whether the first number is greater than the second number or not.

Instructions

- Use comments (#) to explain each step.
- Keep your code neat and readable.
- Submit the vscode .py or google colab file before the deadline.