

Task 1 : Hello, World!

Write a Python program that prints "Hello, World!" to the console.

Task 2 : Variables and Data Types

Create variables to store an integer, a float, a string, and a boolean. Print out the values and data types of these variables.

Task 3 : Arithmetic Operations

First, perform basic arithmetic operations (addition, subtraction, multiplication, and division) on two predefined variables x and y.

For example, you can set x = 3 and y = 4.

Then, extend the program to ask the user to input two numbers and perform the same operations.

Task 4 : User Input

Create a program that asks the user for their name and prints a greeting using their name.

Task 5 : Conditional Statements

Check if two predefined variables are even or odd.

For example, you can set x = 3 and y = 4.

Then, extend the program to ask the user to input a number and determine if it is even or odd.

Task 6 : Loops

Use a loop to print the numbers from 1 to 10.

Task 7 : Lists and Loops

Create a list of your favorite fruits. Print each fruit from the list using a loop.

Task 8 : String Manipulation

Ask the user for their favorite quote, then print it in uppercase and lowercase.

Task 9 : Lists and Conditionals

Create a list of numbers. Write a program that finds and prints the largest number in the list.

Task 10 : Loops

Write a program that prints "Hello" 50 times, each on a new line.

Task 11 : Working with Strings

Write a program to print "Hello" 12 times on the same line, separated by spaces.

Task 12 : Loops and Data Types

Given the list 'elements = [3, 7.76, True, "Argentina"]', print each element and its type, each pair on a new line.

Task 13 : Loops and Strings

Define a variable `name = "your_name"`, for example name = "John Doe". Write a program that prints each letter of the name on a new line.

Task 14 : Spotting mistakes

Correct the following code snippets:

```
18 print("Welcome to class!")
19 print(Programming is fun)
20 print('Hello world!)
```

For each print statement above, first run it, read the error message, fix the mistake, and then run again, to see if the code works properly.

Task 15 : Division and Modulus Operators

Run `print(10 // 3)` and `print(10 % 3)` and analyze what each operator (`//` and `%`) does.

Task 16: Time Conversion

Given `time_in_min = 505`, calculate the number of hours (`num_whole_hours`) and remaining minutes (`num_remaining_minutes`). Then print:

"Number of hours and minutes in 505 min is <hours> hours and <minutes> minutes."

Additional Tasks for the Ambitious

Task 17 : Exception Handling

Create a program that asks the user to enter a number. Handle any exceptions that may occur if the user enters something that's not a number.

Task 18 : Basic Calculator

Build a basic calculator (function) that can perform addition, subtraction, multiplication, and division. The function should take two numbers and an operation and return the result of the operation.

Task 19 : Random Number Generator

Generate a random number between 1 and 10 and ask the user to guess it. Provide feedback on whether their guess was too high, too low, or correct.