Python Assignment

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Objective

Practice using Python variables, input, and basic arithmetic operations.

Task 1

Write a Python script that asks the user for their name, age, and favorite number. The script should then perform the following tasks:

- 1. Greet the user with their name.
- 2. Calculate the user's age in months.
- 3. Calculate the square of the user's favorite number.
- 4. Print the results.

Instructions

- 1. Ask the user for their name and store it in a variable.
- 2. Ask the user for their age and store it in a variable.
- 3. Ask the user for their favorite number and store it in a variable.
- 4. Convert the user's age to months (age in years \times 12).
- 5. Calculate the square of the user's favorite number.
- 6. Print a greeting message with the user's name.
- 7. Print the user's age in months.
- 8. Print the square of the user's favorite number.

Example Output

```
What is your name? John
How old are you? 25
What is your favorite number? 4
Hello, John!
Your age in months is: 300
The square of your favorite number is: 16
```

Task 2

Write a Python script that asks the user for the current temperature in Celsius and converts it to Fahrenheit. The script should then print the result.

Instructions

- 1. Ask the user for the current temperature in Celsius and store it in a variable.
- 2. Use the formula Fahrenheit = Celsius $\times \frac{9}{5} + 32$ to convert the temperature.
- 3. Print the temperature in Fahrenheit.

Example Output

```
What is the temperature in Celsius? 25
The temperature in Fahrenheit is: 77.0
```

Task 3

Write a Python script that asks the user for the number of hours they worked and their hourly wage. The script should then calculate their total pay and print the result.

Instructions

- 1. Ask the user for the number of hours they worked and store it in a variable.
- 2. Ask the user for their hourly wage and store it in a variable.
- 3. Calculate the total pay using the formula Total Pay = Hours Worked \times Hourly Wage.
- 4. Print the total pay.

Example Output

How many hours did you work? 40 What is your hourly wage? 15

Your total pay is: 600