Python Conditionals and Data Types Assignment

Mustafa AbdulRazek

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Task 1: Password Validation

Objective: Practice using while loops, booleans, comparison operations, and input().

Task

Write a Python script that repeatedly asks the user to enter a password until they enter the correct one. The correct password should be predefined in the script. The program should give feedback on whether the entered password is correct or incorrect and should stop only when the correct password is entered.

Example Output

Enter your password: hello Incorrect password. Try again. Enter your password: secure123 Password accepted. Access granted!

Task 2: Guess the Secret Number

Objective: Practice using variables, input(), data types, while loops, and comparison operations.

Task

Write a Python script that picks a secret number between 1 and 20. The script should then repeatedly ask the user to guess the number until they get it right. The program should provide feedback if the guess is too low, too high, or correct.

Example Output

```
Guess the secret number between 1 and 20: 12
Too low!
Guess the secret number between 1 and 20: 18
Too high!
Guess the secret number between 1 and 20: 15
Congratulations! You guessed the secret number 15 correctly!
```

Task 3: Simple ATM Withdrawal

Objective: Practice using variables, input(), data types, while loops, booleans, and comparison operations.

Task

Write a Python script that simulates a simple ATM withdrawal system. The user should be able to enter the amount they want to withdraw, and the program should keep track of their account balance. The withdrawal should only proceed if the user has enough balance. The program should repeatedly allow withdrawals until the user chooses to exit.

Example Output

Your current balance is: \$1000
Enter amount to withdraw (0 to exit): 300
Withdrawal successful. Your new balance is: \$700
Enter amount to withdraw (0 to exit): 500
Withdrawal successful. Your new balance is: \$200
Enter amount to withdraw (0 to exit): 250
Insufficient balance. Your current balance is: \$200
Enter amount to withdraw (0 to exit): 0
Thank you for using our ATM service. Goodbye!