Python Practice Tasks

1. Variable Tasks

Task 1: Basic Variables

```
# Create variables to store:
# - Your name (string)
# - Your age (integer)
# - Your height in meters (float)
# - Whether you like Python (boolean)
# Print all the variables
```

Task 2: Variable Swapping

```
# Swap the values of two variables
a = 5
b = 10
# Your code here (don't use a temporary variable)
# After swapping, a should be 10 and b should be 5
```

2. Operator Tasks

Task 3: Simple Calculator

```
# Create a calculator that takes two numbers and prints:
# - Their sum
# - Their difference
# - Their product
# - Their division result
num1 = 10
num2 = 5
# Your code here
```

Task 4: Modulus Operation

```
# Check if a number is even or odd using the modulus operator
number = 7
# Your code here (should print "Odd" or "Even")
```

3. If Condition Tasks

Task 5: Age Checker

```
# Ask for user's age and print:
# - "Child" if age < 13
# - "Teen" if 13 <= age < 20
# - "Adult" if age >= 20
age = int(input("Enter your age: "))
# Your code here
```

Task 6: Password Checker

```
# Check if a password meets these requirements:
# - At least 8 characters long
password = input("Enter password: ")
# Your code here (print "Valid" or "Invalid")
```

4. While Loop Tasks

Task 7: Countdown

```
# Print numbers from 10 down to 1 using a while loop
# Then print "Happy New Year!"
# Your code here
```

Task 8: Guessing Game

```
# Create a number guessing game where:
# - The secret number is 5
# - User gets unlimited guesses
# - Tell user if guess is too high or low
# - When correct, print "You won!" and exit
secret = 5
# Your code here
```

Task 9: Sum of Numbers

```
# Ask user to enter numbers until they enter 0
# Then print the sum of all entered numbers
total = 0
# Your code here
```

5. Combined Tasks

Task 10: Multiplication Table

```
# Print multiplication table for a number up to 10
# Example for 5: 5x1=5, 5x2=10,...5x10=50
number = int(input("Enter a number: "))
# Your code here
```

Task 11: Simple ATM

```
# Simulate an ATM with:
# - Starting balance of 1000
# - Options: Check balance, Withdraw, Deposit, Exit
# - Use while loop to keep showing menu until Exit
balance = 1000
# Your code here
```