# Python 50 Tasks (Based on Day 2 & Day 3 PDFs)

## Comments, Variables, and Data Types (1-10)

1. Write a single-line comment and print 'Hello World'.
2. Use an inline comment in a print statement.
3. Write a multiline comment using #.
4. Write a multiline comment using triple quotes """.
5. Create 3 valid variable names and print them.
6. Show an invalid variable name and explain why.
7. Assign values to multiple variables in one line and print them.
8. Assign one value to multiple variables and print them.
9. Create variables of type int, float, complex and print their types.
10. Show reassignment of a variable with a new type.

## Strings and String Operations (11-20)

1. Declare a string and convert it to uppercase.
2. Convert a string to lowercase.
3. Remove spaces from the beginning and end of a string using strip().
4. Replace 'Python' with 'Java' in a string.
5. Concatenate two strings with +.
6. Concatenate two strings with a space in between.
7. Format a string using f-strings (showing age).
8. Format a string with a decimal using :.2f.
9. Demonstrate \n (newline) in a string.
10. Demonstrate \t (tab) in a string.

## Numbers and Floats (21-30)

1. Declare a float variable and print it.
2. Perform addition of two floats.
3. Multiply two floats (area of rectangle).
4. Divide two floats and show result.
5. Calculate power using floats.
6. Multiply integer with float.
7. Round a float to 2 decimal places.
8. Convert a float to an integer.
9. Print a negative float value.
10. Store multiple floats in a list and print their sum.

## User Input & Boolean (31-40)

1. Take two integers as input and print their sum.
2. Take two complex numbers and print their sum.
3. Check if a user-entered number is positive.
4. Check if a user-entered number is even.
5. Check if a user-entered number is divisible by 5.
6. Check if two user-entered numbers are equal.
7. Check if a string contains only alphabets (isalpha()).
8. Check if a string is a palindrome.
9. Check if a number is greater than another number.
10. Check if a number lies between 1 and 10.

## Lists and Range (41-50)

1. Create a list of 3 fruits and print it.
2. Create a list with duplicate values and print it.
3. Find the length of a list using len().
4. Create a mixed data type list and print it.
5. Access the second element of a list.
6. Access the last element of a list using negative index.
7. Print a sublist using slicing (2:5).
8. Print all elements from index 2 to end.
9. Check if 'apple' exists in a list.
10. Print numbers from 1 to 10 using range() in a loop.