

Introduction to Programming

Session 1: Introduction to scalar datatypes, print and input

Name:

Batch:

Date:

Please answer all the questions with outputs and return the sheet.

1. Using built in functions (int, float, abs, pow, round) write expressions and code to do the following:

- a) Calculate 3 to the power of 7.
- b) Convert 34.7 to an integer by truncating.
- c) Convert 34.7 to an integer by rounding.
- d) Take the absolute value of -86, then convert it to a floating point number.

2. Given variables x and y, which refer to values 3 and 12.5 respectively, use print to display the following messages. When numbers appear in the messages, the variables x and y should be used in the print statement.

- a) The rabbit is 3.
- b) The rabbit is 3 years old.
- c) 12.5 is average.
- d) $12.5 * 3$
- e) $12.5 * 3$ is 37.5.

3. Write a line of code that prompts the user for his or her name and saves the user's input in a variable called name. Check datatype of variable.

4. Write a Python program that takes two integer inputs, num1 and num2, and demonstrates using all arithmetic operators to perform calculations. The program should perform addition, subtraction, multiplication, division, integer division (floor division), modulo, and exponential operations on the given input numbers. Display the results.