Fundamentals

Python Fundamentals: Sample Program List
simple_print.py
This is a sample program that contains print statements only. It shows how to output multiple values using a single print statement.
input_age.py
This program illustrates simple input, computation, and output statements. The program asks the user for an age and displays the user's age in year 2000.
find_area_perimeter.py
The second sample program for illustrating the programming pattern of input, computation, and output statements. The program inputs width and height of a rectangular plot and displays the plot's area and perimeter.
compute_pole_height.py
This program illustrates the use of the mathematical functions from the math library. Specifically, it shows the use of sin, cos, and sqrt functions in computing the height of a pole.
mortgage_calc_step1.py mortgage_calc_step2.py mortgage_calc_step3.py mortgage_calc_step4.py
The purpose of this sample program is to teach the importance of incremental development in implementing a program. The program computes the monthly and total payments of a loan given the loan amount, period, and annual interest rate. The program is developed in four steps. The first step implements the input routine. The second steps adds the output routine. To test the display format, the values of the monthly and total payments are set to fixed constants. The third step realizes the actual computation for deriving the monthly and total payments. The fourth, and the final, step finalizes the code and improves the display format to two decimal places.