Practice Question

Q1. Write a Python program to create an attendance sheet. The program should take each student's name

and their attendance status (Present/Absent) as input. It should then display the total number of

students who are present and absent, save the attendance record, and allow users to check the

attendance status of a specific student.

Q2. Write a temperature-conversion program that gives the user the option of converting Fahrenheit to

Celsius or Celsius to Fahrenheit. Then carry out the conversion. Use floating-point numbers.

Interaction with the program might look like this:

1. to convert Fahrenheit to Celsius.

2. to convert Celsius to Fahrenheit: 1

Enter temperature in Fahrenheit: 70

In Celsius that's 21.111111

Q3. Assume that you want to generate a table of multiples of any given number. Write a program that allows

the user to enter the number and then generates the table, formatting it into 10 columns and 20

lines. Interaction with the program should look like this (only the first three lines are shown):

Enter a number: 7

7 14 21 28 35 42 49 56 63 70

77 84 91 98 105 112 119 126 133 140

147 154 161 168 175 182 189 196 203 210

Q4. Write a program that calculates how much money you'll end up with if you invest an amount of money

at a fixed interest rate, compounded yearly. Have the user furnish the initial amount, the number of

years, and the yearly interest rate in percent. Some interaction with the program might look like

this:

Enter initial amount: 3000

.. 3000

Enter number of years: 10

Enter interest rate (percent per year): 5.5

At the end of 10 years, you will have 5124.43 dollars.

At the end of the first year you have 3000 + (3000 * 0.055), which is 3165. At the end of the

second year you have 3165 + (3165 * 0.055), which is 3339.08. Do this as many times as

there are years. A for loop makes the calculation easy

Practice Question

- Q5. Write a Python program that takes an integer input from the user and returns its reversed form. The program should ensure that the input number is greater than 0 and less than 1000. If the number does not meet this condition, display an appropriate error message. For example, if the user enters 123, the program should output 321.
- Q6. Write a Python program that finds the second largest number in a list without sorting it. The program should iterate through the list and determine the second largest number using a single pass. Avoid using built-in sorting functions.