

CL1002 – Programming Fundamentals Lab

Quiz # 03 BS CS (Section A)

Difficulty level: ★★☆☆☆

Note:

- Submit a pdf containing all your C code with all possible screenshots of every task output on Google Classroom.
- Please submit your file in this format (roll-no-name) i.e. (23P-1234-Ali.pdf).

Problem: 1

Write a C program for a bakery. Imagine you work at a bakery, and you want to create a special function that helps you determine the type of baked goods to make based on the number of orders you have received. You want to write a function that takes as a parameter the number of orders (an integer) and returns whether you should bake an even number of items, an odd number of items, or no items at all. This function could help you decide what to bake to meet customer demand efficiently.

For instance, if your function receives:

1. 10 orders, it might show "Bake an even number of items."
2. 7 orders, it might show "Bake an odd number of items."
3. 0 orders, it might show "Don't bake any items."

By using this function, you can streamline your baking process based on the number of orders you have, ensuring you meet customer demand effectively.

Problem: 2

Write a C program to take 3 numbers from the user (integer) a, b and c. If a is not zero, find out whether it is common divisor of b and c by using function.

Problem: 3

Imagine you're a traffic sign designer, and you want to create a C program that helps you determine the next traffic sign that needs to be produced in a sequence. Each traffic sign is represented by a character from 'A' to 'Z', and you want to ensure that the signs are produced in alphabetical order by using a function. If the last sign in the alphabet has been produced ('Z'), you want to start again with the first sign ('A') to continue the sequence. The

program should prompt the user to enter a traffic sign character ('A' to 'Z'), and the function should determine the next traffic sign in the sequence. If the user input character is 'Z,' the function should cycle back to 'A' to maintain the sequence. Finally, display the next traffic sign to the user.

Problem: 4

Write a C program that converts a temperature in degrees Celsius to degrees Fahrenheit. The program should prompt the user to enter a temperature in Celsius and then display the equivalent temperature in Fahrenheit by using function. -

$$\text{Fahrenheit} = (\text{Celsius} * 9/5) + 32$$

