

GEDIZUNIVERSITY

izmir

Faculty of Engineering and Architecture
Computer Engineering Department

COM 101 – INTRODUCTION TO PROGRAMMING

LAB Assignment #4

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A- Example

Write a C program that provides a user menu below and performs the tasks.

```
This program calculates factorial and cumulative summation of a number.
*****
1- Factorial of a number
2- Cumulative summation of a number
-1-Exit
Please enter your choice:
1
*****
Please enter a number to calculate factorial:
0
Factorial of 0 is 1

*****
1- Factorial of a number
2- Cumulative summation of a number
-1-Exit
Please enter your choice:
2
*****
Please enter a number to calculate cumulative sum:
-5
Cumulative sum of -5 is -15

*****
1- Factorial of a number
2- Cumulative summation of a number
-1-Exit
Please enter your choice:
-1
*****
BYE BYE...
```

B- Exercise

Note that when you doing exercise questions, you are expected to use good programming practices you learn up to that time.

The highest common factor, hcf, of two or more integers is the largest positive integer that divides the numbers without a remainder when at least one of them is non-zero. For instance, hcf of 20 and 36 is 4. Write C program calculates hcf of the two numbers specified by user if it is possible. Otherwise, inform the user with a meaningful message.

```
***This program finds highest common factor (hcf) of two numbers***
Enter first integer :
5
Enter second integer :
7
There is no hcf between 5 and 7

-----
Process exited after 3.438 seconds with return value 32
Devam etmek için bir tuşa basın . . .
```

```
***This program finds highest common factor (hcf) of two numbers***
Enter first integer :
9
Enter second integer :
24
HCF of 9 and 24 is 3

-----
Process exited after 4.499 seconds with return value 21
Devam etmek için bir tuşa basın . . . _
```