

## Assignment 1:

**(1)** Write a program that take two integers from the user and print the results of this equation:

$$\text{Result} = ((\text{num1} + \text{num2}) * 3) - 10$$

**(2)** Write a program that print your name and your grade in a new line.

**(3)** Write a program for converting temperature from degrees Celsius to degrees Fahrenheit, given the formula:

$$F = C \times \frac{9}{5} + 32$$

**(4)** Write a program that reads the radius of a circle and calculates the area and circumference then prints the results.

**(5)** Write a program to print the ASCII value of a character input by the user.

**(6)** Write a program that print the relation between two integer number if those numbers are equal, not equal and which one contain the higher value.

**(7)** Write a program that takes three integers, and prints out the smallest number.

**(8)** Write a program that reads a positive integer and checks if it is a perfect square.

**(9)** Write a program that reads a student grade percentage and prints "Excellent" if his grade is greater than or equal 85, "Very Good" for 75 or greater; "Good" for 65, "Pass" for 50, "Fail" for less than 50.

**(10)** Write a program to make a simple calculator using switch-case. The calculator takes the operation (+ or – or \* or /) and takes the two input arguments and print the results.

**(11)** Print sum of first 100 integers. (With data validation)

**(12)** Write a program that reads a positive integer and computes the factorial.

**(13)** Write a program that reads a positive integer and checks if it is a prime.

**(14)** Write a program to display English alphabets from A to Z.

**(15)** Write a program to calculate the power of a number. The number and its power are input from user.

**(16)** Write a program to reverse a number.

**(17)** Write a program to count number of digits in a decimal number.

**(18)** Write a program to display half pyramid using stars pattern.

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**(19)** Write a program to display inverted half pyramid using stars pattern.

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**(20)** Write a program to display a full pyramid using stars pattern.

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**(21)** Write a program to display cross or X-shape using stars pattern.

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*Thanks and Good Luck*

*Eng / Mohamed Tarek*