

Question 1

Suppose gpa is a variable containing the grade point average of a student. Suppose the goal of a program is to let a student know if he/she made the Dean's list (the gpa must be 3.5 or above). Write an if... else... statement that prints out the appropriate message (either "Congratulations—you made the Dean's List" or "Sorry you didn't make the Dean's List")

Question 2

Using a loop structure of your choice, Create a multiplication table of any digit input by the user. Your program should have a user defined function

Question 3

The factorial of n (written n!) is the product of the integers between 1 and n. Thus $4! = 1*2*3*4 = 24$. By definition, $0! = 1$.

Factorial is not defined for negative numbers.

Write a program that asks the user for a non-negative integer and computes and prints the factorial of that integer.

Question 4

Write a program which prints the numbers 1 to 110, 11 numbers per line. The program shall print "Your surname" in place of the numbers which are multiples of 3, "Your last name" for multiples of 5, "Your title" for multiples of 7, "Best friend's name" for multiples of 3 and 5, and so on.

Question 5

Write a program that prompts user for the size (a non-negative integer in int); and prints the following square pattern using two nested for-loops.

Enter the size: **5**

```
# # # # #  
# # # # #  
# # # # #  
# # # # #  
# # # # #
```

Question 6

Write a program that reads three edges for a triangle and determines whether the input is valid. The input is valid if the sum of any two edges is greater than the third edge. Use a conditional operator in your work