**TCS NQT Coding Question 1**

**Problem Statement –** An automobile company manufactures both a two wheeler (TW) and a four wheeler (FW). A company manager wants to make the production of both types of vehicle according to the given data below:

* 1st data, Total number of vehicle (two-wheeler + four-wheeler)=v
* 2nd data, Total number of wheels = W

The task is to find how many two-wheelers as well as four-wheelers need to manufacture as per the given data.  
**Example :**

**Input :**200  -> Value of V  
540   -> Value of W

**Output :**TW =130 FW=70

**Explanation:**130+70 = 200 vehicles  
(70\*4)+(130\*2)= 540 wheels

**Constraints :**

* 2<=W
* W%2=0
* V<W

Print “INVALID INPUT” , if inputs did not meet the constraints.

**The input format for testing**The candidate has to write the code to accept two positive numbers separated by a new line.

* First Input line – Accept value of V.
* Second Input line- Accept value for W.

**The output format for testing**

* Written program code should generate two outputs, each separated by a single space character(see the example)
* Additional messages in the output will result in the failure of test case

**TCS NQT Coding Question 2**

**Problem Statement –** Given a string S(input consisting) of ‘\*’ and ‘#’. The length of the string is variable. The task is to find the minimum number of ‘\*’ or ‘#’ to make it a valid string. The string is considered valid if the number of ‘\*’ and ‘#’ are equal. The ‘\*’ and ‘#’ can be at any position in the string.  
**Note :** The output will be a positive or negative integer based on number of ‘\*’ and ‘#’ in the input string.

* (\*>#): positive integer
* (#>\*): negative integer
* (#=\*): 0

**Example 1:  
Input 1:**

* ###\*\*\*   -> Value of S

**Output :**

* 0   → number of \* and # are equal