Computer Science Society

Question # 1: Write a program to find **Ratio** of two numbers.

Note: Predefined functions are not allowed.

Example: Input: 7 & 21 Output 1:3

Question # 2: A town has a water tank that contains gallons of water. If it rains water is stored in the same tank. Calculate the water will last for an input daily water usage and rain and total water. The usage does not exceed input value. Do not include the last day is the water remaining for the day is less than the daily usage amount.

Example: Input: Water Tank=10000 & Rain=1000 & Daily Use=1000, Output: 11 days

Question # 3: Given two integers **n** and **m**, in a single operation n can be multiplied by **2** or **3**. The task is to convert **n** to **m** with minimum number of operations. If it is impossible to convert **n** to **m** with the given operation then print **-1**.

Question # 4: Given a generic digital clock, having **h** number and **m** number of minutes, the task is to find how many times the clock shows **identical time**. A specific time is said to be identical if every digit in the hours and minutes is same i.e. the time is of type **D:D**, **D:DD**, **DD:D**, **DD:DD.**

Note: h < 24 && m < 60.

Example: 1:1, 22:2, 3:33, 11:11

Question # 5: Given a positive integer, find the largest number that could be generated by swapping two digits at most two times. If not possible write no.