C++ / Competitive Programming

Assignment No. 2

Q1. For a given number 'n', print the following pattern:

For n=4:

```
      *
    * * *
  * * * * *
* * * * * * *
  * * * * *
    * * *
      *
```

Q2. For a given number 'n', print the following pattern:

For n=5:

```
1 2 3 4 5
1 2 3 4 *
1 2 3 * * *
1 2 * * * * *
1 * * * * * *
```

Q3. Make a calculator program. Whats and Hows are totally based on you and your creativity.

Q4. Given a string, check whether it is a palindrome or not. A palindromic string is one which when read from

either sides, is read the same. For example "madam",
12321, "level".

Q5. You have 2 variables, swap their values. Whats and
Hows are totally based on you and your creativity.

Q6. Input 2 matrices of NxM dimensions and print their
sum.

Q7. Keep taking numbers input from user till the
cumulative product of these numbers does not descend -1.

Q8. You are given alist of numbers that contains only 0s
and 1s. Write a program to sort this list in ascending
order. Find a solution which scans the list only once.
Don't take help of any extra list for your solution. This
means you need to change in the given array itself.

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Prepared by-

Shubh Bansal and Nandeesh Gupta

(C++ / CP Mentors)