

Coding Blocks Assignment – Industrial Training C++

Question 1

GANESHA'S PATTERN

Take as input N, an odd number (≥ 5). Print the following pattern as given below for $N = 7$.

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

Question 2

Given N. For eg For $N=6$, following pattern will be printed.

```
1
11
111
1001
11111
100001
```

Question 3

Take N as input. For a value of $N=5$, we wish to draw the following pattern :

```
5 4 3 2 1 0 1 2 3 4 5
 4 3 2 1 0 1 2 3 4
  3 2 1 0 1 2 3
   2 1 0 1 2
    1 0 1
     0
```

Question 4

Take N (number of rows), print the following pattern (for $N = 5$).

```
      0
     1 0 1
    2 1 0 1 2
   3 2 1 0 1 2 3
  4 3 2 1 0 1 2 3 4
 5 4 3 2 1 0 1 2 3 4 5
```

Question 5

Take N as input. For a value of N=5, we wish to draw the following pattern :

```
5 4 3 2 1 0 1 2 3 4 5
4 3 2 1 0 1 2 3 4
3 2 1 0 1 2 3
2 1 0 1 2
1 0 1
0
1 0 1
2 1 0 1 2
3 2 1 0 1 2 3
4 3 2 1 0 1 2 3 4
5 4 3 2 1 0 1 2 3 4 5
```

Question 6

You are given a number, N=78012821. You need to print the largest number that can be formed by subtracting each digit from 5. You can either subtract a particular digit from 5 or simply print that particular digit without subtracting it 5.

N=78012821

Output : 78543834 this is the largest number that can be formed by subtracting all the digits from 5 and getting the largest number.

Ex :

N=11223421

Ouput : 44333434

Question 7

Given a N, tell whether is an ARMSTRONG Number or Not

Armstrong Number : $371 = 3^3 + 7^3 + 1^3$, if this thing holds true then it's an Armstrong number.

$ABCD = A^3 + B^3 + C^3 + D^3$ it will be a Armstrong number.