

# VELAMMAL ENGINEERING COLLEGE

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION

### CODING TEST II

1. Given some N and M representing the Rows and columns print the following patterns (N=3, M=5 is shown below)

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

Solid Rectangle

Hollow Rectangle

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

2. Given the value of N (represents the number of rows) print the following patterns (N=6 is shown below):

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

Half Pyramid

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

```

Inverted Full Pyramid

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

Hollow Full Pyramid

3. Given the value of N print the following pattern (N=5 is shown below):

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

4. Given the value of N print the following patterns (N=5 is shown below):

```

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

Solid Diamond

```

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

Hollow Diamond

```

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

Solid Half  
Diamond

5. Print the following pattern for any value of N (N=5 is shown below) :

```

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

6. Print the following pattern for some arbitrary value of N (N=5 shown below):

```

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

7. Given the values of N,M print the following pattern (N=7, M=7 is shown) :

```

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

8. For a given value of N print the following pattern. Here n is the height and width of pattern to be printed.

```

      *           Left Arrow  *
      *           *
      *           *
      *           *
      *           *
*****          *****
      *           *
      *           *
      *           *
      *           *
* Right Arrow    *
  
```

9. input= ZOHO

Output:

```
  Z
 ZOZ
ZOHOZ
ZOHOHOZ
ZOHHHHHOZ
ZO00000000Z
ZZZZZZZZZZZZZZ
```

Generalise this for any input

10. Complete the following piece of code to print the pattern:

Pattern (for N=5):

```
1
22
333
4444
55555
```

Complete the code (you should not add any more lines of code):

Python:

```
for i in range(1,int(input())):
```

```
    print() #complete the print statement, another condition is that you are nor allowed to use
            #string operation like "2" * 2 that will give you "22"
```