

hollow half pyramid using numbers

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

hollow inverted half pyramid using numbers

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

hollow full pyramid using numbers

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

palindrome full pyramid using alphabets

```
      A
     A B A
    A B C B A
   A B C D C B A
  A B C D E D C B A
```

palindrome pyramid using stars and alphabets

```
*****A*****
*****B*B*****
*****C*C*C*****
*****D*D*D*D*****
****E*E*E*E*E****
***F*F*F*F*F*F***
```

half diamond pattern using stars(input=4)

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

half diamond pattern using stars and alphabets in palindrome manner(input=4)

```
*
* A *
* A B A *
* A B C B A *
* A B C D C B A *
* A B C B A *
* A B A *
* A *
```

Diamond pattern using numbers(input=4)

```
1
1 2
1 2 3
1 2 3 4
1 2 3
1 2
```

1

Diamond pattern using alphabets(input=4)

```
A
A B
A B C
A B C D
A B C
A B
A
```

butterfly pattern using numbers (input=5)

```
10      5
10 6    3 5
10 6 2  3 5
10 6    3 5
10      5
```