

Assignment-5

-D. Chandu
-192211232

To create an inverted pyramid & a hollow work using matrix in Python, we can use nested loop to build patterns.

1. Inverted Pyramid:-

→ The inverted pyramid is essentially an upside down pyramid, we can create by using space in first row & then gradually increasing no. of "*".

```
def inverted_pyramid(rows):
```

```
    for i in range(rows, 0, -1):
```

```
        for j in range(rows, -i):
```

```
            print(" ", end=" ")
```

```
        for i in range(2*i-1):
```

```
            print("*", end=" ")
```

```
        print()
```

```
rows = int(input("enter no. of rows:"))
```

```
inverted_pyramid.
```

2. Hollow Block:-

→ To create a hollow block, we can print (*) on the first and last rows as well as on the first & last columns. The interior of the block is filled with the spaces.

→ 'Hollow_block' function generates the hollow block pattern.

→ "A" empty is created in the middle.


```
def hollow_block(rows, cols):
```

```
    for i in range(rows):
```

```
        for j in range(cols):
```

```
            if (i == 0 or i == rows - 1 or j == 0 or j == cols - 1):
```

```
                print("#", end=" ")
```

```
            else:
```

```
                print(" ", end=" ")
```

```
        print()
```

```
rows = int(input("enter no. of rows: "))
```

```
cols = int(input("enter no. of columns: "))
```

```
hollow_block(rows, cols)
```

→ the number of rows and columns determine the dimension of the block.

OUTPUT:

1. Inverted Pyramid:

```

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

2. Hollow Block:

```

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