1. Hollow Diamond Pattern

```python
n = 5
for i in range(n):
    for j in range(n - i - 1):
        print(" ", end="")
    for j in range(2 * i + 1):
        if j == 0 or j == 2 * i:
            print("*", end="")
        else:
            print(" ", end="")
    print()


for i in range(n - 2, -1, -1):
    for j in range(n - i - 1):
        print(" ", end="")
    for j in range(2 * i + 1):
        if j == 0 or j == 2 * i:
            print("*", end="")
        else:
            print(" ", end="")
    print()
```

Output:

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

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

---

2. Butterfly Pattern

n = 5

for i in range(1, n+1):

    print("*" * i + " " * (2*(n-i)) + "*" * i)

for i in range(n, 0, -1):

    print("*" * i + " " * (2*(n-i)) + "*" * i)

Output:

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

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3. Number Palindrome Pyramid

n = 5

for i in range(1, n+1):

   for j in range(1, n-i+1):

     print(" ", end="")

```
    for j in range(i, 0, -1):
        print(j, end="")
    for j in range(2, i+1):
        print(j, end="")
    print()
```

Output:

```
 1
  212
 32123
 4321234
543212345
```