

# Simple Printing Patterns in Python

Printing patterns is a common exercise to understand loops and iterations in Python. Here are some simple examples of printing patterns using loops.

## 1. Printing a Square Pattern

```
# Example of printing a square pattern
n = 5
for i in range(n):
    for j in range(n):
        print("*", end=" ")
    print()
```

Output:

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

## 2. Printing a Right-Angled Triangle Pattern

```
# Example of printing a right-angled triangle pattern
n = 5
for i in range(1, n + 1):
    for j in range(i):
        print("*", end=" ")
    print()
```

Output:

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

## 3. Printing an Inverted Right-Angled Triangle Pattern

```
# Example of printing an inverted right-angled triangle pattern
n = 5
for i in range(n, 0, -1):
    for j in range(i):
        print("*", end=" ")
    print()
```

Output:

```
* * * * *
```

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

#### 4. Printing a Pyramid Pattern

```
# Example of printing a pyramid pattern
n = 5
for i in range(n):
    print(' ' * (n - i - 1) + '*' * (i + 1))
```

Output:

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

#### 5. Printing an Inverted Pyramid Pattern

```
# Example of printing an inverted pyramid pattern
n = 5
for i in range(n, 0, -1):
    print(' ' * (n - i) + '*' * i)
```

Output:

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

#### 6. Printing a Diamond Pattern

```
# Example of printing a diamond pattern
n = 5
for i in range(n):
    print(' ' * (n - i - 1) + '*' * (i + 1))
for i in range(n-1, 0, -1):
    print(' ' * (n - i) + '*' * i)
```

Output:

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

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

### **Stay Updated**

Be sure to `star` this repository to stay updated with new examples and enhancements!

### **License**

This project is protected under the MIT License.

### **Contact**

Panagiotis Moschos - [pan.moschos86@gmail.com](mailto:pan.moschos86@gmail.com)

*Note: This is a Python script and requires a Python interpreter to run.*

---

Happy Coding

Made with `bat` by Panagiotis Moschos (<https://github.com/pmoschos>)