

Pattern 117

```
# *****
# *****
# ****
# ***
# **
# **

n = 6

for i in range(n, 0, -1):
    k = i + 1 if i % 2 != 0 else i
    print("*" * k)
```

Pattern 118

```
# *****
# *****
#    ***
#    ***
#    **
#    **

n = 6

for i in range(n, 0, -1):
    k = i + 1 if i % 2 != 0 else i
    print(" " * (n - k) + "*" * k)
```

Pattern 119

```
# *
# *
# **
# **
# ***
# ***

n = 3

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

Pattern 120

```
#   *
#   **
#  ***
# ***
#
for i in range(1, 4):
    for x in range(2, 0, -1):
        for y in range(2, i - 1, -1):
            print(" ", end="")
        for j in range(i):
            print("*", end="")
    print()
```

Pattern 121

```
# ***
# ***
# **
# *
# *
```

```
for i in range(3, 0, -1):
    for x in range(2, 0, -1):
        for j in range(i):
            print("*", end="")
    print()
```

Pattern 122

```
# ***
# ***
# **
# **
# *
# *
```

```
for i in range(3, 0, -1):
    for x in range(2, 0, -1):
        for y in range(2, i - 1, -1):
            print(" ", end="")
        for j in range(i):
            print("*", end="")
    print()
```

Pattern 123

```
#    *
#    *
#    ***
#    ***
# *****
# *****
```



```
n = 3
z = 1
for i in range(n):
    for j in range(2, 0, -1):
        for x in range(n - 1, i - 1, -1):
            print(" ", end="")
        for y in range(z):
            print("*", end="")
        print()
    z += 2
```

Pattern 124

```
#      **
#      **
#      *   *
#      *   *
#      *           *
#      *           *
#      *           *
# *           *

n = 7
x = n
for i in range(1, n + 1):
    for j in range(1, 2 * n + 1):
        if j == x or j == 2 * n - x + 1:
            print("*", end="")
        else:
            print(" ", end="")
    print()
if i % 2 == 0:
    x -= 2
```

Pattern 125

```
# *****
#   ***
#     *
#   ***
# *****

n = 3
s1 = n * 2 - 1
s2 = 3

for i in range(1, n + 1):
    print(" " * (i - 1), end="")
    print("*" * s1)
    s1 -= 2

for i in range(1, n):
    print(" " * (n - i - 1), end="")
    print("*" * s2)
    s2 += 2
```

Pattern 126

```
#      * * * * *
#      * * * * * *
#      * * * * * * *
# * * * * * * * * *
# * * * * * * * * *
# * * * * * * * * *
# * * * * * * * *
# * * * * * * *
#      * * * * *
```



```
for i in range(1, 10):
    if i == 1 or i == 9:
        x = 6
        z = 4
    elif i == 2 or i == 8:
        x = 8
        z = 2
    elif i == 3 or i == 7:
        x = 9
        z = 1
    else:
        x = 10
        z = 0

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

Pattern 127

```
# ***   ***
# ***** *****
# *****
# *****
# *****
# *****
# ***
# *
n = 6

# Top part of the heart
for i in range(n // 2, n + 1, 2):
    print(" " * (n - i), end="")
    print("*" * i, end="")
    print(" " * (n - i), end="")
    print("*" * i)

# Bottom part of the heart
for i in range(n, 0, -1):
    print(" " * (n - i), end="")
    print("*" * (2 * i - 1))
```

Pattern 128

```
# ** **
# *   *
# *   *
# *   *
# *   *
#   *

for row in range(6):
    for col in range(7):
        if (row == 0 and col % 3 != 0) or (row == 1 and col
% 3 == 0) or (row - col == 2) or (row + col == 8):
            print("*", end="")
        else:
            print(" ", end="")
    print()
```

Pattern 129: X-Max Tree

```
#          *
#        * *
#      * * *
#    * * * *
#  * * *
# * * * *
# * * * *
# * * * *
# * * * *
# * * * *
```

```
height = 3
width = 4

space = width * 5
r = 1
m = 1

for r in range(1, height):
    for i in range(m, width + 1):
        for j in range(space, i - 1, -1):
            print(" ", end="")
        for k in range(1, i + 1):
            print("* ", end="")
        print()
    m += 2
    width += 2

for i in range(1, 5):
    for j in range(space - 3, 0, -1):
```

```
print(" ", end="")
for k in range(1, 5):
    print("* ", end="")
print()
```

Pattern 130

```
# * * * *
# *      *
# *      *
# *      *
# *      *
# * * * * *

n = 5

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

Pattern 131

```
# * *
# * *
# * *
# * *
# * * * * *
```

```
n = 5
mid = n // 2 + 1

for i in range(1, n + 1):
    for j in range(1, n + 1):
        if j == mid or i == n or (i + j == mid and j <= mid):
            print("* ", end="")
        else:
            print(" ", end="")
    print()
```

Pattern 132

```
# * * * *
#
#
# * * * *
#
#
# * * * *
#
n = 5
mid = n // 2 + 1

for i in range(1, n + 1):
    for j in range(1, n + 1):
        if i == 1 or i == n or i == mid or (j == 1 and i >= mid) or (j == n and i < mid):
            print("* ", end="")
        else:
            print(" ", end="")
print()
```

Pattern 133

```
# * * * *
#
# * * * *
#
# * * * *
#
# * * * *
#
n = 5
mid = n // 2 + 1

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

Pattern 134

```
# *      *
# *      *
# * * * * *
#      *
#      *

n = 5
mid = n // 2 + 1

for i in range(1, n + 1):
    for j in range(1, n + 1):
        if i == mid or (j == 1 and i <= mid) or j == n:
            print("* ", end="")
        else:
            print("  ", end="")
print()
```

Pattern 135

```
# * * * *
# *
# * * * *
#         *
# * * * *

n = 5
mid = n // 2 + 1

for i in range(1, n + 1):
    for j in range(1, n + 1):
        if i == 1 or i == n or i == mid or (j == 1 and i <= mid) or (j == n and i > mid):
            print("* ", end="")
        else:
            print(" ", end="")
    print()
```

Pattern 136

```
# * * * *
# *
# * * * *
# *         *
# * * * * *

n = 5
mid = n // 2 + 1

for i in range(1, n + 1):
    for j in range(1, n + 1):
        if i == 1 or i == n or i == mid or j == 1 or (j == n and i > mid):
            print("* ", end="")
        else:
            print(" ", end="")
    print()
```

Pattern 137

```
# * * * *
#       *
#       *
#   *
# *

n = 5

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

Pattern 138

```
# * * * *
# *
# * * * *
# *
# * * * *

n = 5
mid = n // 2 + 1

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

Pattern 139

```
# * * * *
# *
# * * * *
#
# *
# * * * *

n = 5
mid = n // 2 + 1

for i in range(1, n + 1):
    for j in range(1, n + 1):
        if i == 1 or i == n or i == mid or (j == 1 and i <=
mid) or j == n:
            print("* ", end="")
        else:
            print(" ", end="")
print()
```

Pattern 140

```
#      *
#      * *
#      *****
# *      *
# *      *

n = 5
x = n

for i in range(1, n + 1):
    for j in range(1, 2 * n + 1):
        if j == x or j == n + i - 1:
            print("*", end="")
        elif j >= x and j <= n + i - 1 and i == n // 2 + 1:
            print("*", end="")
        else:
            print(" ", end="")
    print()
    x -= 1
```

Pattern 141

```
# *****
# *   *
# *****
# *   *
# ***

n = 5

for i in range(1, n + 1):
    for j in range(1, n + 1):
        if j == 1 or (i == 1 or i == n or i == n // 2 + 1)
and j <= n - 1:
            print("*", end="")
        elif i != 1 and i != n and j == n:
            print("*", end="")
        else:
            print(" ", end="")
print()
```

Pattern 142

```
# *****
# *
# *
# *
# *****

n = 5

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

Pattern 143

```
# ****
# *   *
# *   *
# *   *
# ***

n = 5

for i in range(1, n + 1):
    for j in range(1, n + 1):
        if j == 1 or (i == 1 or i == n) and j <= n - 1:
            print("*", end="")
        elif i != 1 and i != n and j == n:
            print("*", end="")
        else:
            print(" ", end="")
    print()
```

Pattern 144

```
# *****
# *
# *****
# *
# *****

n = 5

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

Pattern 145

```
# *****
# *
# *****
# *
# *

n = 5

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

Pattern 146

```
# *****
# *
# * ***
# *   *
# *****

n = 5

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