Loops in Python

In [1]:
```
Lst = [5,3,6,8,9,2,7]
```

In [2]:
```
Lst
```

Out[2]:
```
[5, 3, 6, 8, 9, 2, 7]
```

In [3]:
```
LstE = []
```

In [4]:
```
for i in Lst:
    if i % 2 == 0:
        LstE.append(i)

print(LstE)
```

```
[6, 8, 2]
```

In [5]:
```
LstE = []
LstO = []
```

In [6]:
```
for i in Lst:
    if i % 2 == 0:
        LstE.append(i)
    else:
        LstO.append(i)

print(LstE)
print(LstO)
```

```
[6, 8, 2]
[5, 3, 9, 7]
```

In [7]:
```
Lst2 = [4,3,6,2,7,3,5,2]
```

In [8]:
```
LstUnique = []
```

In [9]:
```
for i in Lst2:
    if i not in LstUnique:
        LstUnique.append(i)

print(LstUnique)
```

```
[4, 3, 6, 2, 7, 5]
```

In [10]:
```
print(4*"*")
```

```
****
```

In [11]:
```
for i in range(4):
    print(4 * "*")
```

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

In [12]:
```
for i in range(1, 5, 1):
    print(i * "+")
```

```
+
++
+++
++++
```

In [13]:
```
for i in range(5, 0, -1):
    print(i * "+")
```

```
+++++
++++
+++
++
+
```

In [14]:
```
for i in range(1, 5, 1):
    print(i * "+")

for i in range(5, 0, -1):
    print(i * "+")
```

```
+
++
+++
++++
+++++
++++
+++
++
+
```

In [15]:
```
n = 5
for i in range(1, n, 1):
    print(i * "+")
```

```
+
++
+++
++++
```

In [16]:
```
n = 5
for i in range(1, n, 1):
    print((n-i) * "+")
```

```
++++
+++
++
+
```

In [17]:
```
n = 5
for i in range(1, n, 1):
    print((n-i) * "-" + "+")
```

```
----+
---+
--+
-+
```

In [18]:
```
n = 5
for i in range(1, n, 1):
```

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

```
----+
---++
--+++
-++++
```

In [29]:
```
n = 5
for i in range(n, 0, -1):
    print((n-i) * "-" + i * "+")
```

```
+++++
-++++
--+++
---++
----+
```

In [19]:
```
n = 5
for i in range(1, n, 1):
    print((n-i) * "-" + (2*i)  * "+")
```

```
----++
---++++
--++++++
-++++++++
```

In [20]:
```
n = 5
for i in range(0, n, 1):
    print((n-i) * "-" + (2*i)  * "+")
```

```
-----
----++
---++++
--++++++
-++++++++
```

In [21]:
```
n = 5
for i in range(0, n, 1):
    print((n-i) * "-" + (2*i+1)  * "+")
```

```
-----+
----+++
---+++++
--+++++++
-+++++++++
```

In [22]:
```
n = 5
for i in range(0, n, 1):
    print((n-i) * " " + (2*i+1)  * "+")
```

```
    +
   +++
  +++++
 +++++++
+++++++++
```

In [23]:
```
n = 6
for i in range(n, 0, -1):
    print((n-i) * " " + (2*i-1)  * "+")
```

```
++++++++++
 +++++++++
  +++++++
   +++++
    +++
     +
```

In [24]:
```
n = 5
for i in range(0, n, 1):
    print((n-i) * " " + (2*i+1)  * "+")

n = 6
for i in range(n, 0, -1):
    print((n-i) * " " + (2*i-1)  * "+")
```

```
     +
    +++
   +++++
  +++++++
 +++++++++
++++++++++
 +++++++++
  +++++++
   +++++
    +++
     +
```

In [25]:
```
n = 6
for i in range(n, 0, -1):
    print((n-i) * " " + (2*i-1)  * "+")

n = 5
for i in range(0, n, 1):
    print((n-i) * " " + (2*i+1)  * "+")
```

```
++++++++++
 +++++++++
  +++++++
   +++++
    +++
     +
     +
    +++
   +++++
  +++++++
 +++++++++
```

In [27]:
```
n = 6
for i in range(n, 0, -1):
    print((n-i) * " " + (2*i-1)  * "+")

n = 5
for i in range(0, n+1, 1):
    print((n-i) * " " + (2*i+1)  * "+")
```

```
++++++++++
 +++++++++
  +++++++
   +++++
    +++
     +
     +
    +++
   +++++
  +++++++
 +++++++++
++++++++++
```

In [28]:
```
n = 6
for i in range(n, 0, -1):
    print((n-i) * " " + (2*i-1)  * "+")

n = 5
for i in range(1, n+1, 1):
    print((n-i) * " " + (2*i+1)  * "+")
```

```
++++++++++
 +++++++++
  +++++++
   +++++
    +++
     +
    +++
   +++++
  +++++++
 +++++++++
++++++++++
```

In [ ]:
```
```

In [44]:
```
n = 5
for i in range(1, n, 1):
    print(i * "+")
n = 5
for i in range(5, n, -1):
    print(i * "+")
```

```
+
++
+++
++++
```

In [43]:
```
n = 5
for i in range(1, n, 1):
    print((n-i) * "-" + i * "+")

n = 5
for i in range(n, 0, -1):
    print((n-i) * "-" + i * "+")
```

```
----+
---++
--+++
-++++
+++++
-++++
--+++
---++
----+
```

In [ ]:
```
txt ='python'
print(txt[::-1])
```

In [52]:
```
txt =['python','civic','mongodb', 'radar']
```

In [54]:
```
for i in txt:
    print(i)
```

```
python
civic
mongodb
radar
```

In [55]:
```
for i in txt:
    print(i[::-1])
```

```
nohtyp
civic
bdognom
radar
```

In [56]:
```
for i in txt:
    if i == i[::-1]:
        print(i)
```

```
civic
radar
```

In [ ]:
```
txt =['python','civic','mongodb', 'radar']

for i in txt:
    if i == i[::-1]:
        print(i, " is a Plaindrome")
    else:
        print(i, " is NOT a Plaindrome")
```

In [ ]:
```

```