## Useful function

```
Sort a string or a list
sorted(a)
     sorted(['b', 'c', 'a'])
     >> ['a', 'b', 'c']
```

"--".join(['a', 'b', 'c'])

>> 'a--b--c'

## Character

```
ord(a)
                    Return ASCII value of character a
    print(ord('a'))
    >> 97
                    Return character of ASCII value n
chr(n)
    print(chr(97))
    >> a
```

## String

```
Turn all characters into uppercase characters
s.upper()
     "abcbd".upper()
    >> 'ABCBD'
s.lower()
                 Turn all characters into lowercase characters
    "ABC".lower()
    >> 'abc'
s.split(a) Split a string s into a list at substring a
     "abcbd".split("b")
    >> ['a', 'c', 'd']
s.join(l)
                   Joining elements in list 1 with string s as a
                   joiner
```

```
s.replace(a,b)
                    Replace every substring a in s with b
     "abcbd".replace("b","z")
     >> 'azczd'
s.index("a")
                          Find "a" in string s
     myString = "Position of a character"
     myString.index('s')
     >> 2
s.isdigit()
                          Check if s is digit or not
     "1".isdigit()
     >> True
List
1.append(s)
Add an element s into list 1
     1 = [0, 1]
     1.append(2)
     print(l)
     >> [0, 1, 2]
1 = 1[::-1]
                    Reverse order in list l
     1 = [0, 1, 2]
     1 = 1[::-1]
     print(l)
     >> [2, 1, 0]
1.pop()
                    Return the last element in list 1
     1 = [0, 1]
     a = 1.pop()
     print(a)
     >> 1
```

## Math

```
Don't forget to import math if you want to use this library!
math.pi
                   Value of pi
     a = math.pi
    print(a)
     >> 3.141...
math.ceil(x) Return the ceiling of x
    math.ceil(2.5)
    >> 3
math.floor(x) Return the floor of x
    math.floor(2.5)
    >> 2
math.fabs(x) Return the absolute value of x
    math.fabs(-2)
    >> 2.0
math.sqrt(x) Return the square root of x
    math.sqrt(9)
     >> 3.0
math.sin(x) Return sine of x (in radian)
    print(math.sin(2*math.pi))
     >> 0
                   Return cosine of x (in radian)
math.cos(x)
    print(math.cos(2*math.pi))
    >> 1
```