In [2]:
```
#strings
#INDEXING
#We will often want to pick out individual characters from a string.
#Python uses square brackets to
#SLICING
#S[2:]
```

In [15]:
```
string = "school"
print(string[2:])#this code will print values from index
#position 2 to
#the end
#syntax for slicing is string_name[start:stop:step]
for i in string:#traverse through an array
    print(i,end="",sep="|")
print()
for i in range(len(string)):# when using the range()
    #and len()function
    print(string[i])
```

```
hool
school
s
c
h
o
o
l
```

In [25]:
```
#string methods
#lower()
#--->lower case
s="KENYA"
s = s.lower()
print(s)
#upper()
#--->converts to uppercase
s="kenya"
s = s.upper()
print(s)
#replace(x,y)
    #returns with every occurence of x replaced with y
j="kenya"
j=j.replace("a","e")#it reolaced every occurence of "a" with "e"
print(j)
#count()
#counts the number of ocurrences of x in string
print("the letter e occurs:",j.count("e"))
#index()
#returns the location of the occurence of x
print("the letter is at index: ",j.index("k"))
#isalpha()
```

```
    #returns true if every character of the string is a lettter
    #tells if a character is a letter or not
    def letter_checker():
        s=input("enter string:")
        for i in range(len(s)):
            if s[i].isalpha():
                print(s[i])
            else:
                print("The character {} is not a letter:".format(s[i]))
    letter_checker()
```

```
kenya
KENYA
kenye
the letter e occurs: 2
the letter is at index:  0
enter string:anselmo123flavian
a
n
s
e
l
m
o
The character 1 is not a letter:
The character 2 is not a letter:
The character 3 is not a letter:
f
l
a
v
i
a
n
```

In [34]:
```
    #string concantenation
    def con():
        #use the plus operator to join the two strings
        s="hello"
        e="world"
        print(s+e)

    con()
```

```
helloworld
```

In [54]:
```
#LISTS
```

```
L=[1,2,3,4,5]#list initialisation
#MAX...>prints the maximum value
#min-->prints the minimum value
#sum-->returns the sum of values in the list
print(max(L))#the largest value
print(min(L))#the smallest value
print(sum(L))#the sum of the list
print(len(L))#the length of the list
#LIST METHODS
#append(x)-->add a value at the end of the list
#sort()-->sort the list
#reverse()-->reverse the list
#remove(x)-->removes the first occurence of x
#pop(p)--->removes the item at index p and returns its value
#insert(index,item)-->inserts b at index a
```

```
5
1
15
5
```

In [80]:
```
list=[1,2,3,4,5,6,7]
def scan(list):
    for i in list:
        if(i%2!=0):
            list.remove(i)
        else:
          print(list)
    print(list)
scan(list)
```

```
[2, 4, 6]
```

In [1]:
```
# list with EVEN and ODD number
list = [11, 22, 33, 44, 55]
def scan(list):
    for i  in range(len(list)):
        if(list[i]%2 != 0):
            list.pop(i)
    print (list)
scan(list)
```

```
---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
<ipython-input-1-bf87079ac7d2> in <module>
      6             list.pop(i)
      7     print (list)
----> 8 scan(list)
```

```
<ipython-input-1-bf87079ac7d2> in scan(list)
      4     for i  in list:
      5         if(i%2 != 0):
----> 6             list.pop(i)
      7     print (list)
      8 scan(list)

IndexError: pop index out of range
```

In [ ]: