1. Guess output of each slice:

In [3]:

```
s="Python is Object Oriented"
print(s[-1])
print(s[::-1])
print(s[:-1])
print(s[1:1])
print(s[4:10])
```

```
d
detneirO tcejbO si nohtyP
Python is Object Oriente

on is
```

2. What error do you see for following statements:

In [5]:

```
s= ‘’
print(s[1])
#SyntaxError: invalid character in identifier
```

```
  File "<ipython-input-5-1f67b6127610>", line 1
    s= ‘’
        ^
SyntaxError: invalid character in identifier
```

3. Do you get any error for the following code, if not give the output:

In [6]:

```
S=‘Gaurav’
print(s[1])
#SyntaxError: invalid character in identifier
```

```
  File "<ipython-input-6-cfc813e1d8cf>", line 1
    S=‘Gaurav’
             ^
SyntaxError: invalid character in identifier
```

4. Find output of the following:

In [8]:

```
#a
s='a b cd'
print(len(s))
print(s[::2])
print(len(s[::2]))
```

```
6
abc
3
```

In [8]:

```
#b
s='a#b#c#d#'
```

```
print(s)
print(s.split())
print(s.split('#'))
l=s.split('#')
s='$'.join(l)
print(s)
```

```
a#b#c#d#
['a#b#c#d#']
['a', 'b', 'c', 'd', '']
a$b$c$d$
```

In [12]:

```
#c
S='Gaurav'
S=S[::-2][::-2]
print(S)
```

```
av
```

In [13]:

```
#d
print(1>2)
```

```
False
```

In [15]:

```
#e
print(4%2, 5%2, 2%5, sep=',')
```

```
0,1,2
```

In [20]:

```
#f
s='abcba'
print(s.upper())
print(s.count('A'), end = ' ,')
print(s.count('A', 2,4) , end = ' ,')
print(s.count('a', 2,4) , end = ' ,')
```

```
ABCBA
0 ,0 ,0 ,
```

5. WAP to input a string and remove all spaces from it.

In [21]:

```
s=input('enter a string:-')
print(s.strip())
```

```
enter a string:-     Pratiksha
Pratiksha
```

6.What does this symbol denote:

[]

In [ ]:

```
empty list type
```

7.WAP to print all

methods(functions/operations) available in a string (Hint : dir())

```
In [23]: dir(str)
```

```
Out[23]: ['__add__',
          '__class__',
          '__contains__',
          '__delattr__',
          '__dir__',
          '__doc__',
          '__eq__',
          '__format__',
          '__ge__',
          '__getattribute__',
          '__getitem__',
          '__getnewargs__',
          '__gt__',
          '__hash__',
          '__init__',
          '__init_subclass__',
          '__iter__',
          '__le__',
          '__len__',
          '__lt__',
          '__mod__',
          '__mul__',
          '__ne__',
          '__new__',
          '__reduce__',
          '__reduce_ex__',
          '__repr__',
          '__rmod__',
          '__rmul__',
          '__setattr__',
          '__sizeof__',
          '__str__',
          '__subclasshook__',
          'capitalize',
          'casefold',
          'center',
          'count',
          'encode',
          'endswith',
          'expandtabs',
          'find',
          'format',
          'format_map',
          'index',
          'isalnum',
          'isalpha',
          'isascii',
          'isdecimal',
          'isdigit',
          'isidentifier',
          'islower',
          'isnumeric',
          'isprintable',
          'isspace',
          'istitle',
          'isupper',
          'join',
          'ljust',
          'lower',
          'lstrip',
          'maketrans',
          'partition',
          'replace',
          'rfind',
          'rindex',
          'rjust',
          'rpartition',
          'rsplit',
          'rstrip',
          'split',
          'splitlines',
          'startswith',
          'strip',
          'swapcase',
          'title',
          'translate',
          'upper',
          'zfill']
```

8.Write statement to check if rstrip method is available in the str class.

(Hint : Use the find function or in)

In [10]:

```
str='rstrip'
print(str.find('rstrip'))
```

```
0
```

9.WAP to store the following patterns in a string variable and then print them:

In [34]:

```
s="*****"
t="  *\n  *\n  *\n  *"
print(s)
print(t)
```

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

In [59]:

```
t="*\t*"
print(t)
t1="* *  *\t*"
print(t1)
t2="*   *  \t*"
print(t2)
t3="*     \t*"
print(t3)
```

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

In [125…

```
x="  ______"
print(x)
x1="  |\t|"
```

```
print(x1)
x2="  o \t|\n /|\\ \t|"
print(x2)
x3=" / \\ \t|"
print(x3)
x4=" _______|"
print(x4)
```

```
 ______
 |     |
 o     |
/|\    |
/ \    |
_______|
```

10. WAP to input a string and replace all space with new lines (\n) and print again.

In [2]:

```
s=input("enter a string :-")

s1=s.replace(" ",'\n')
print(s1)
```

```
enter a string :-Love on Life
Love
on
Life
```

11. WAP to input complete name(first and last name separated by space) and print first and last name separately along with their length in upper case.

In [10]:

```
name=input("Enter your full name :- ")
sepr=name.replace(" ","\n")
print(sepr)
```

```
Enter your full name :- Pratiksha
Pratiksha
```

12.WAP to input a string and split it into 2 halves. The string can be of any length

In [2]:

```
s=input("Enter a string :- ")
s1=s[0:len(s)//2]
s2=s[len(s)//2:len(s)]
print(s1,s2)
```

```
Enter a string :- String
Str ing
```