

USING PYTHON AS CALCULATOR

```
In [1]: 4+4 #addition
```

```
Out[1]: 8
```

```
In [2]: 30*5-2
```

```
Out[2]: 148
```

```
In [3]: 30*(5-3)
```

```
Out[3]: 60
```

```
In [4]: 30*(5-2)/5
```

```
Out[4]: 18.0
```

```
In [5]: 18/3
```

```
Out[5]: 6.0
```

```
In [6]: 45/7
```

```
Out[6]: 6.428571428571429
```

```
In [7]: 45//7
```

```
Out[7]: 6
```

```
In [8]: 15%2
```

```
Out[8]: 1
```

```
In [9]: 18%2
```

```
Out[9]: 0
```

```
In [10]: 4**2
```

```
Out[10]: 16
```

```
In [11]: 3**3
```

```
Out[11]: 27
```

```
In [12]: 4**3
```

```
Out[12]: 64
```

```
In [13]: 3**2 #square
```

```
Out[13]: 9
```

```
In [14]: 2**7 #power
```

```
Out[14]: 128
```

```
In [15]: l=20  
b=30  
print(l*b)
```

```
600
```

```
In [16]: 4*5.5-2
```

```
Out[16]: 20.0
```

```
In [19]: tax=12.5//100  
price=100.50
```

```
In [20]: price*tax
```

```
Out[20]: 0.0
```

Text

```
In [26]: 'spam eggs'
```

```
Out[26]: 'spam eggs'
```

```
In [27]: 'my name is swapna:)!hi!'
```

```
Out[27]: 'my name is swapna:)!hi!'
```

```
In [28]: '2010'
```

```
Out[28]: '2010'
```

```
In [30]: 'doesn\'t'
```

```
Out[30]: "doesn't"
```

```
In [31]: 'what ,they,said'
```

```
Out[31]: 'what ,they,said'
```

```
In [32]: 'they,said,hi'
```

```
Out[32]: 'they,said,hi'
```

```
In [33]: s='first line.\n second line'  
s
```

```
Out[33]: 'first line.\n second line'
```

```
In [34]: print(s)
```

```
first line.  
second line
```

```
In [35]: print('c:\some\name')
```

```
c:\some  
ame
```

```
In [36]: print("""\n  
         my name:is[swapna]\n         -b\n         -h myname\n         """)
```

```
my name:is[swapna]\n-b\n-h myname
```

```
In [38]: 3*'un'+ 'ium'
```

```
Out[38]: 'unununium'
```

```
In [39]: 2*'s'+ 'wei'
```

```
Out[39]: 'sswei'
```

```
In [40]: 'py' 'thon'
```

```
Out[40]: 'python'
```

```
In [41]: 'sridhar' 'swapna'
```

```
Out[41]: 'sridharswapna'
```

```
In [42]: word='swapna'
```

```
In [43]: word[0]
```

```
Out[43]: 's'
```

```
In [45]: word[5]
```

```
Out[45]: 'a'
```

```
In [46]: word[-1]
```

```
Out[46]: 'a'
```

```
In [47]: word[-2]
```

```
Out[47]: 'n'
```

```
In [48]: word[3]
```

```
Out[48]: 'p'
```

```
In [51]: word[:]
```

Out[51]: 'swapna'

In [53]: word[:2]

Out[53]: 'sw'

In [54]: word[:1]

Out[54]: 's'

In [55]: word[:2]+word[2:]

Out[55]: 'swapna'

In [56]: word[:4]+word[4:]

Out[56]: 'swapna'

In [57]: 'b'+ word[:]

Out[57]: 'bswapna'

In [58]: 'm' + word[:]

Out[58]: 'mswapna'

LIST

In [60]: l=[]
l

Out[60]: []

In [61]: type(l)

Out[61]: list

In [62]: l1=[32,45,12,67,45,23,]
l1

Out[62]: [32, 45, 12, 67, 45, 23]

In [63]: l1[0]

Out[63]: 32

In [64]: l1[-1]

Out[64]: 23

In [65]: l1[5]

Out[65]: 23

```
In [68]: l1 + [50,70,80]  
l1
```

```
Out[68]: [32, 45, 12, 67, 45, 23]
```

```
In [69]: l1 + [10,20]
```

```
Out[69]: [32, 45, 12, 67, 45, 23, 10, 20]
```

```
In [70]: l1 + [50,70,80]
```

```
Out[70]: [32, 45, 12, 67, 45, 23, 50, 70, 80]
```

```
In [71]: l1
```

```
Out[71]: [32, 45, 12, 67, 45, 23]
```

```
In [72]: l1[3]=20
```

```
In [73]: l1
```

```
Out[73]: [32, 45, 12, 20, 45, 23]
```

```
In [74]: l1[0]=10
```

```
In [75]: l1
```

```
Out[75]: [10, 45, 12, 20, 45, 23]
```

```
In [78]: l2=['sridhar','swapna','sreecharan','mokshith']
```

```
In [79]: l2
```

```
Out[79]: ['sridhar', 'swapna', 'sreecharan', 'mokshith']
```

```
In [81]: l2.append('hi')
```

```
In [82]: l2
```

```
Out[82]: ['sridhar', 'swapna', 'sreecharan', 'mokshith', 'hi']
```

```
In [83]: l2.remove('hi')
```

```
In [84]: l2
```

```
Out[84]: ['sridhar', 'swapna', 'sreecharan', 'mokshith']
```

```
In [85]: l3=l2.copy()
```

```
In [86]: l3
```

```
Out[86]: ['sridhar', 'swapna', 'sreecharan', 'mokshith']
```

```
In [88]: letters=['a','b','c','d','e','f']
```

```
In [89]: letters
```

```
Out[89]: ['a', 'b', 'c', 'd', 'e', 'f']
```

```
In [90]: letters[:]
```

```
Out[90]: ['a', 'b', 'c', 'd', 'e', 'f']
```

```
In [91]: for i in letters:  
         print(i)
```

```
a  
b  
c  
d  
e  
f
```

```
In [92]: for i in enumerate(letters):  
         print(i)
```

```
(0, 'a')  
(1, 'b')  
(2, 'c')  
(3, 'd')  
(4, 'e')  
(5, 'f')
```

```
In [93]: len(letters)
```

```
Out[93]: 6
```

```
In [95]: a=['a','b','c']
```

```
In [96]: n=[1,2,3,4]
```

```
In [97]: x=[a,n]
```

```
In [98]: x
```

```
Out[98]: [['a', 'b', 'c'], [1, 2, 3, 4]]
```

```
In [99]: x[1]
```

```
Out[99]: [1, 2, 3, 4]
```

```
In [100... x[0]
```

```
Out[100... ['a', 'b', 'c']
```

```
In [102... x[0][0]
```

```
Out[102... 'a'
```

```
In [103... x[1][0]
```

```
Out[103... 1
```

In [104... `m=['swapna']`

In [105... `b=['sridhar']`

In [106... `x=[m,b]`

In [107... `x`

Out[107... `[['swapna'], ['sridhar']]`

PROGRAMMING

In [110... `#fibnacci series`
`# some of two elements define the next`
`a,b=0,1`
`while a<10:`
 `print(a)`
 `a,b=b,a+b`

0
1
1
2
3
5
8

In [111... `a,b=0,1`
`while a<50:`
 `print(a)`
 `a,b=b,a+b`

0
1
1
2
3
5
8
13
21
34

In [112... `i=256*256`
`print('the vallue of i is ',i)`

the vallue of i is 65536

In [113... `a,b=0,1`
`while a<1000:`
 `print(a,end=', ')`
 `a,b=b,a+b`

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987,

In []: