In [3]:
```
spam=1
spam
```

Out[3]: 1

In [4]:
```
2+2
```

Out[4]: 4

In [5]:
```
50-5*6
```

Out[5]: 20

In [6]:
```
(50-5*6)/4
```

Out[6]: 5.0

In [7]:
```
8/3
```

Out[7]: 2.6666666666666665

In [8]:
```
8//3
```

Out[8]: 2

In [9]:
```
5*3+2
```

Out[9]: 17

In [10]:
```
5**2
```

Out[10]: 25

In [11]:
```
2**7
```

Out[11]: 128

In [12]:
```
width=20
height=5*9
area=width*height
area
```

Out[12]: 900

In [13]:
```
4*3.75-1
```

Out[13]: 14.0

In [14]:
```
tax=12.5/100
price=100.50
price*tax
```

Out[14]: 12.5625

In [ ]:
```
price=10
```

In [ ]:
```
tax=12
```

In [15]:
```
price*tax
```

Out[15]: 12.5625

In [16]:
```
price+_
```

Out[16]: 113.0625

In [17]:
```
round(_,2)
```

Out[17]: 113.06

In [18]:
```
'doesn\'t'
```

Out[18]: "doesn't"

In [23]:
```
s=('arun.\nsahu.')
```

In [24]:
```
print(s)
```

```
arun.
sahu.
```

#exponential e0=1.0 e1=10.0 e2=100.0 e3=1000.0

In [1]:
```
f=1e0
f
```

Out[1]: 1.0

In [2]:
```
f1=2e1
f1
```

Out[2]: 20.0

In [3]:
```
f2=2.4e2
f2
```

Out[3]: 240.0

In [5]:
```
f3=2.5e3
f3
```

Out[5]: 2500.0

In [6]:
```
type(f3)
```

Out[6]: float

In [12]:
```
i=40
i
```

Out[12]: 40

In [13]:
```
id(i)
```

Out[13]: 140709183924568

In [15]:
```
p=30
q=30
r=30
print(id(p))
print(id(q))
print(id(r))
```

```
140709183924248
140709183924248
140709183924248
```

string indexing

In [16]:
```
str='hello'
str
```

Out[16]: 'hello'

In [17]:
```
str[0]
```

Out[17]: 'h'

In [18]:
```
str[1]
```

Out[18]: 'e'

In [19]:
```
str
```

Out[19]: 'hello'

In [21]:
```
print(str[0])
print(str[1])
print(str[2])
print(str[3])
print(str[4])
```

```
h
e
l
l
o
```

In [22]:
```
str
```

Out[22]: 'hello'

In [23]:
```
print(str[-1])
print(str[-2])
print(str[-3])
```

```
print(str[-4])
print(str[-5])
```

```
o
l
l
e
h
```

In [24]:
```
str
```

Out[24]: 'hello'

#len function

In [25]:
```
len(str)
```

Out[25]: 5

#SLICING IT DENOTED AS : forword slicing backword slicing step slicing

In [26]:
```
str
```

Out[26]: 'hello'

In [27]:
```
str[1:3]
```

Out[27]: 'el'

In [28]:
```
str='welcome'
str
```

Out[28]: 'welcome'

In [29]:
```
str[2:4]
```

Out[29]: 'lc'

In [30]:
```
str[0:4]
```

Out[30]: 'welc'

In [32]:
```
str[0:6]
```

Out[32]: 'welcom'

step slicing

In [34]:
```
s='hellopython'
s
```

Out[34]: 'hellopython'

In [35]:
```
s[0:10:3]
```

Out[35]: 'hlyo'

In [36]:
```
s[0:10:2]
```

Out[36]: 'hloyh'

In [37]:
```
s
```

Out[37]: 'hellopython'

In [38]:
```
s[::1]
```

Out[38]: 'hellopython'

In [39]:
```
s[::2]
```

Out[39]: 'hloyhn'

In [41]:
```
s
```

Out[41]: 'hellopython'

In [43]:
```
s[1:8:2]
```

Out[43]: 'elpt'

In [44]:
```
s
```

Out[44]: 'hellopython'

In [46]:
```
s[1:7:1]
```

Out[46]: 'ellopy'

In [47]:
```
s[:]
```

Out[47]: 'hellopython'

In [48]:
```
s[::3]
```

Out[48]: 'hlyo'

In [49]:
```
a='arun'
b='sahu'
print(a+b)
```

```
arunsahu
```

In [50]:
```
a='arun  kumar'
b='  sahu'
print(a+b)
```

```
arun  kumar  sahu
```

In [ ]:
```

```