Variables and print function

In [1]:
```
amount=1000
tax1=12.5/100
tax2=13/100
total= amount+((amount*(tax1))+(amount*(tax1))*tax2)
print("Amount including tax is",total)
```

```
Amount including tax is 1141.25
```

In [2]:
```
idli=60
dosa=30
poori=80
print ("Customer Name :Sai Preyanshi & sai bhavyanshi")
total =2*idli+2*dosa+2*poori
print ("idli=60","\ndosa=30","\npoori=80","\nAmount without VAT is",total)
vat=total*12/100
servicecharge=total*5/100
print("servicecharge is",servicecharge,"(Optional)")
print("vat amount",vat)
final=print("total bill is ",(total+vat+servicecharge),"\ntotal bill without ser
finalrounded=print("total bill is(rounded) ",round(total+vat+servicecharge),"\nt
```

```
Customer Name :Sai Preyanshi & sai bhavyanshi
idli=60
dosa=30
poori=80
Amount without VAT is 340
servicecharge is 17.0 (Optional)
vat amount 40.8
total bill is  397.8
total bill without service charge is  380.8
total bill is(rounded)  398
total bill without service charge is(rounded)  381
```

Type casting

In [5]:
```
int(5.5)
```

Out[5]: 5

In [6]:
```
int('45')
```

Out[6]: 45

In [7]:
```
int('value')
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
Cell In[7], line 1
----> 1 int('value')

ValueError: invalid literal for int() with base 10: 'value'
```

In [8]:
```
float(5+3j)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[8], line 1
----> 1 float(5+3j)

TypeError: float() argument must be a string or a real number, not 'complex'
```

In [9]:
```
str(5+3j)
```

Out[9]:
```
'(5+3j)'
```

In [10]:
```
real(5+3j)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[10], line 1
----> 1 real(5+3j)

NameError: name 'real' is not defined
```

In [11]:
```
complex(10,20)
```

Out[11]:
```
(10+20j)
```

Indexes and slicing

In [18]:
```
a='today is a beautiful day'
a[4]
```

Out[18]:
```
'y'
```

In [19]:
```
a[-3]
```

Out[19]:
```
'd'
```

In [20]:
```
a[-4]
```

Out[20]:
```
' '
```

In [21]:
```
a[1:9]
```

Out[21]:
```
'oday is '
```

In [22]:
```
a[1:18:2]
```

Out[22]:
```
'oa sabatf'
```

In [24]:
```
a[-1:-18:-2]
```

Out[24]:
```
'ydlftabas'
```

In [26]:
```
a[::-1]
```

Out[26]: 'yad lufituaeb a si yadot'

In [32]:
```
print(a[1],a[6],a[9])
```

o i a

Operators

In [33]:
```
a=5
b=9
a+b
```

Out[33]: 14

In [34]:
```
a*b
```

Out[34]: 45

In [35]:
```
a//b
```

Out[35]: 0

In [36]:
```
a/b
```

Out[36]: 0.5555555555555556

In [37]:
```
a**b
```

Out[37]: 1953125

In [45]:
```
a/=2
a
```

Out[45]: 0.25

In [42]:
```
a/=2
a
```

Out[42]: 0.125

In [44]:
```
a=1
a/=2
a
```

Out[44]: 0.5

In [46]:
```
a>b
```

Out[46]: False

In [47]:
```
a>b&b>a
```

Out[47]: False

In [48]:
```
a>b or b>a
```

Out[48]:
```
True
```

In [49]:
```
a=89
bin(a)
```

Out[49]:
```
'0b1011001'
```

In [50]:
```
int(0b1011001)
```

Out[50]:
```
89
```

In [ ]:
```

```