

```
In [ ]: # wap take the radidus of a circle calculate area of the circle
# var: radidus var: pi=3.14
# formuale: pi*radius*radius
# print the answers using f string and format

# wap take the breadth and height of a right angle triangle
# calculate the area
# var1: bredath var2: height
# formuale : 0.5*breadth*heigh

# wap take the bill amount and tip amount
# calculate total bill
# var1: bill amount var2: tip amount
# formuale

# wap take the Length and breadth of a rectangle calculate area
# var1: Length var2: breadth
# formulae: Length * breadth
```

```
In [ ]: # if you are not able to do
# take pen and book
# 3rd
# on the notes you need write that
```

```
In [ ]: # wap take the radidus of a circle calculate area of the circle
# var: radidus var: pi=3.14
# formuale: pi*radius*radius
# print the answers using f string and format
```

```
In [2]: radius=20
pi=3.14
area=pi*radius*radius
print(f"the are of circle is : {area}")
```

the are of circle is : 1256.0

```
In [3]: # wap take the breadth and height of a right angle triangle
# calculate the area
# var1: bredath var2: height
# formuale : 0.5*breadth*heigh

breadth=20
height=40
area=0.5*breadth*height
print(f"the area of Right angle triangle is : {area}")
```

the area of Right angle triangle is : 400.0

```
In [4]: # wap take the bill amount and tip amount
# calculate total bill
# var1: bill amount var2: tip amount
# formuale
bill_amount=1000
tip_amount=200
total_bill=bill_amount+tip_amount
total_bill
```

Out[4]: 1200

```
In [5]: # wap take the Length and breadth of a rectangle calculate area
# var1: Length var2: breadth
# formulae: Length * breadth
breadth=20
height=40
area=breadth*height
print(f"the area of rectangle is : {area}")
```

the area of rectangle is : 800

```
In [ ]: radius=20
pi=3.14

breadth=20
height=40

bill_amount=1000
tip_amount=200
```

### input

- in above we provided the value
- input is the inbuilt function
- using input the user can provide any value

```
In [6]: input
```

```
Out[6]: <bound method Kernel.raw_input of <ipykernel.ipkernel.IPythonKernel object at 0
x000001CCCF31AFD0>>
```

**note:whenever if we see bound method or function which indicates we forgot the brackets**

```
In [8]: input()
```

```
Out[8]: '100'
```

```
In [9]: input()
```

```
Out[9]: 'python'
```

```
In [10]: a=100
type(a)
```

```
Out[10]: int
```

```
In [11]: b=input()
```

```
In [12]: b
```

```
Out[12]: '200'
```

```
In [13]: name="python"
name
```

Out[13]: 'python'

```
In [14]: name=input()
```

```
In [15]: name
```

Out[15]: 'nareshit'

```
In [17]: n1=input() # n1='100'
n2=input() # n2='200'
n3=input() # n3='300'
```

```
In [18]: n1,n2,n3
```

Out[18]: ('100', '200', '300')

```
In [22]: n1=input("enter the number1:")
n2=input("enter the number2:")

#n1='100'
#n2='200'
```

```
In [26]: n1=input("enter the number1:") # n1='500'
n2=input("enter the number2:") # n2='600'
n1+n2 # '500'+ '600'='500600'
```

Out[26]: '500600'

### input values by default string type

```
In [24]: '100'+ '200'
```

Out[24]: '100200'

```
In [25]: 100+200
```

Out[25]: 300

```
In [27]: str1='apple'
str2='is'
str3='fruite'
str1+str2+str3
```

Out[27]: 'appleisfruite'

```
In [31]: str1=input("enter a string1:")
str2=input("enter a string2:")
str3=input("enter a string3:")
str1+str2+str3
```

Out[31]: ' apple is fruite '

```
In [33]: n1=int(input("enter the number1:")) # n1=int('500')=500
n2=int(input("enter the number2:")) # n2=int('600')=600
n1+n2 # 500+600=1100
```

Out[33]: 1100

```
In [32]: n1=int('500')
n2=int('600')
n1+n2
```

Out[32]: 1100

```
In [34]: n1=input("enter the number1:") # n1='500'
n2=input("enter the number2:") # n2='600'
int(n1)+int(n2) # int('500')+int('600')=500+600=1100
```

Out[34]: 1100

```
In [ ]: n1=int(input("enter the number1:")) # n1=int('500')=500
n2=int(input("enter the number2:")) # n2=int('600')=600
n1+n2 # 500+600=1100

n1=input("enter the number1:") # n1='500'
n2=input("enter the number2:") # n2='600'
int(n1)+int(n2) # int('500')+int('600')=500+600=1100
```

```
In [36]: n1=float(input("enter the number1:"))
n2=int(input("enter the number2:"))
n1+n2
```

Out[36]: 20.5

### eval

- eval means evaluate
- it is related to math family
- which means it works only number represent as strings
- it will not work on english letters
- eval will convert the respective data type which is user enter
- if user enter 10 in quotes it will convert into 10
- if user enter 10.5 in quotes it will convert into 10.5

```
In [ ]: int('10') # 10
int('10.5') # error

float('10') # 10.0
float('10.5') # 10.5
```

```
In [37]: eval('10'),eval('10.5')
```

Out[37]: (10, 10.5)

```
In [40]: n1=eval(input("enter the number1:"))
n2=eval(input("enter the number2:"))
```

```
n1+n2
```

```
Out[40]: 30.5
```

```
In [ ]: # 1)wap ask the user enter 3 numbers n1,n2,n3 from ketboard
# calculate average

# 2)wap ask the user enter name age city
# print my name is python im 10 years old and came from hyd

# 3)wap ask the user to enter radidus of a circle calculate area of the circle
# var: radidus var: pi=3.14
# formuale: pi*radius*radius
# print the answers using f string and format

# 4)wap ask the user enter breadth and height of a right angle triangle
# calculate the area
# var1: bredath var2: height
# formuale : 0.5*breadth*heigh

# 5)wap ask the user the bill amount and tip amount
# calculate total bill
# var1: bill amount var2: tip amount
# formuale

# 6)wap ask the user the bill amount and tip percentage
# take tip percentage as 10
# calculate total bill= bill amount+ bill amount*tip per/100
# var1: bill amount var2: tip amount
# formuale

# 7)wap ask the Length and breadth of a rectangle calculate area
# var1: Length var2: breadth
# formulae: Length * breadth

# 8) wap ask the user take the radius and calculate volume of sphere
# formulae: pi*r**3(pi*r*r*r)

# 9) wap ask the user enter amount in dollars convert into rupees
# 1$=85rs

# 10)wap ask the user enter weight in kgs convert into pounds
# 1kg= 2.2pounds
```

```
In [ ]: - strings or english does not require eval

- avg= eval(n1+n2+n3)
```