In [1]:

```
num1=10
num2=20
add=num1+num2
```

Out[5]: '50'

In [24]:

```
input("enter a number:") enter a number:5
```

Out[24]: '5'

In [8]:

```
input("enter a name:") enter a name:python
```

Out[8]: 'python'

In [9]:

```
num1=input("enter a number1:")
# num1='100' num2=input("enter a number2:") # num2='200'
num1+num2 # '100'+'200'='100200'
```

```
enter a number1:100
enter a number2:200
```

Out[9]: '100200'

```
'100'+'200'
```

In [10]:

Out[10]: '100200'

Note: The default data type from keyboard using input keyword is string

In [12]:

```
num1=10 # inte
type(num1)

num2=input("enter a number:") # string
type(num2)
```

```
enter a number:20
```

Out[12]: str

In [14]: In [16]:

In [ ]: In [23]:

In [18]:

```
the addition of 20 and 20.5 is
40.5
```

```
int('20.5') # give the error
```

In [30]:

```
num1=int(input("enter a
number1:")) # num1=int('100')=100
num2=int(input("enter a
number2:")) # num2=int('200')=200
print(f"the addition of {num1} and
{num2} is {num1+num2}")
```

```
enter a number1:100
enter a number2:200
the addition of 100 and 200 is 300
```

```
num1=input("enter a number1:") #
num1=int('100')=100
num2=input("enter a number2:") #
num2=int('200')=200
add=int(num1)+int(num2)
print(f"the addition of {num1} and
{num2} is {add}")
```

```
enter a number1:100
enter a number2:200
the addition of 100 and 200 is 300
```

```
num1=int(input("enter a
number1:"))
num2=float(input("enter a
number2:"))
add=num1+num2
print(f"the addition of {num1} and
{num2} is {add}")
```

```
enter a number1:20
enter a number2:20.5
```

In [29]:

```
round(3.333
    4)
```

Out[29]: 3

In [31]: In [ ]:

WAP ask the user enter salary

ask the user tax percentage
calculate total tax to pay
salary=100000
tax_per=10
tax_pay= 100000*10/100=

```
salary=eval(input("enter the salary:"))
tax_per=eval(input("enter the tax in
%:"))
tax_pay=salary*tax_per/100
print(f"the total tax pay is
{tax_pay}")
```

```
enter the salary:10000
enter the tax in %:10
the total tax pay is 1000.0
```

the conversation between Mother and

: evaluate the number automatically based on original data type

```
num1=eval(input("enter a
number1:"))
num2=eval(input("enter a
number2:"))
add=num1+num2
print(f"the addition of {num1} and
{num2} is {add}")
```

```
enter a number1:300
enter a number2:200
the addition of 300 and 200 is 500
```

```
# WAP ask the user enter a
num1,num2 and num3 # find the
average= (num1+num2+num3)/3
n1=eval(input("enter number1:"))
n2=eval(input("enter number2:"))
n3=eval(input("enter number3:"))
add=n1+n2+n3
avg=round(add/3,2)
print(f"the avergae of {n1},{n2}
and {n3} is: {avg}")
```

```
enter number1:2
enter number2:3
enter number3:5
the avergae of 2,3 and 5 is: 3.33
```

```
daughter
# Daughter: Hey mom
# Mother: Hello beta!
# Daughter: Did you know governament
has immplemented free bus service #
Mother: Oh really!
# Daughter: will go to grandmother
houes
# Mother: Yes
# Conductor: show me your identity card
# Mother: No !
# Conductor: Pay the money
# Mother: How much
# Conductor: How many km you want
travel
# Mother: 25 <km>
# Mother: how much charge
# Conductor: per km 2rs <charge>
# Mother: 25*2 <total>:km*charge
# Mother: 50rs <total
In [5]:
print("=====Convesration between mother
and daughter====================")
input("Daughter:")
input("Mother:")
input("Daughter:")
input("Mother:")
input("Daughter:")
input("Mother:")
print("================= after they
reach busstop==================")
input("Conductor:")
input("Mother:")
input("Conductor:")
input("Mother:")
input('Conductor:')
km=eval(input("mother:"))
```

```
input("mother")
fare=eval(input("conductor:"))
total=km*fare
print(f"the total charge is {total}")

=====Convesration between mother and
daughter====================
Daughter:hey mom
Mother:hey beta
Daughter:did you know
Mother:oh really
Daughter:will go to grand mother house
Mother:yes
================= after they reach
busstop====================
Conductor:show me your id
Mother:we for got
Conductor:pay the money
Mother:how much
Conductor:how many km you are travel
mother:25
motherhow much per km
conductor2

---------------------------------------
---------------------------------- -
TypeError Traceback (most recent call
las t)
Cell In[5], line 17
 15 input("mother")
 16 fare=input("conductor")
---> 17 total=km*fare
 18 print(f"the total charge is
{fare}")

TypeError: can't multiply sequence by
non-int of type 'str'
```

```
 In [ ]: In [7]:
input("Daughter: ")
input("Mother: ")
input("Daughter: ")
input("Mother: ")
input("Daughter: ")
input("Mother: ")
```

```
input("Conductor: ")
input("Mother: ")
input("Conductor: ")
input("Mother: ")
input("Conductor: ")
dis=eval(input("Mother
: ")) input("Mother:
")
cost =
eval(input("Conductor:
")) input=(f"Conductor
: per km {cost}")
tot_cost = dis*cost
input(f"Mother:{cost}*
{tot_cost} ")
input("Mother: ")


cost=2
dis=25
tot_cost=dis*cost
input(f"Mother:{cost}*

{tot_cost} ")
```

```
Mother:2*50 100

Out[7]: '100'
```

```
b=eval(input("enter
a number2:")) a+b

enter a number1:100
enter a number2:200
```

```
In [9]:
#Why do we use eval

a=eval(input("enter
a number1:"))

Out[9]: 300
```

```
# bar: we accept only INR
# you: what should i do
# bar: will convert dollars
into rupees # you: how much
one dolar into INR= 80 #
you: how many dollars you
required=800/80=10 # bar:
give me 10 dollars
```

```
In [ ]:
############ Create your
own story ########## # You
went bar
# you: how much
# bar: 800rs
# you: i have only dollars
In [10]:
```

```
Bar: 800
You: I have only USD
Bar: we accept INR only
You: what should we do now
Bar: Lets convert USD to INR
You: How many INR is equal to 1
USD80
Bar: Give me 10.0 dollors
```

```
total_bill = eval(input("enter the
total bill in inr: ")) oneDollor =
eval(input("You: How many INR is
equal to 1 USD")) totlaDollorToPay
= total_bill/oneDollor
print(f"Bar: Give me
{totlaDollorToPay} dollors")

enter the total bill in inr: 800
You: How many INR is equal to 1
USD80
Bar: Give me 10.0 dollors
```

```
In [13]: In [20]:
```

```
import time

print("You: how much the bill")
time.sleep(2)
bill=eval(input("enter the bill"))
time.sleep(2)
print("Bar:",bill)
time.sleep(2)
print("You: I have only USD")
time.sleep(2)
print("Bar: we accept INR only")
time.sleep(2)
print("You: what should we do now")
time.sleep(2)
print("Bar: Lets convert USD to
INR")
inr=eval(input("You: How many INR
is equal to 1 USD:"))
total=bill/inr
print(f"Bar: Give me {total}
```

```
input("You: ")
total_bill = eval(input("Bar: "))
input("You: ")
input("Bar: ")
input("You: ")
input("Bar: ")
oneDollor = eval(input("You: How
many INR is equal to 1 USD"))
totlaDollorToPay =
total_bill/oneDollor
print(f"Bar: Give me
{totlaDollorToPay} dollors")

You: how much the bill
```

dollors")

You: how much the bill
enter the bill800
Bar: 800
You: I have only USD

Bar: we accept INR only
You: what should we do now
Bar: Lets convert USD to INR
You: How many INR is equal to 1
USD:80
Bar: Give me 10.0 dollors

In [18]: In [26]:

```
print("Bar:",bill)
print("Bar:
{}".format(bill))
print(f"Bar: {bill}")
```

Bar: 800
Bar: 800
Bar: 800

In [27]:

```
print(f"Bar: Give me
{total} dollors") Bar:
```

Give me 10.0 dollors

```
45/4 # 45 division 4
# It is a normal
division
```

Out[27]: 11.25

In [28]:

```
45%4 # 45 modulus
4
```

Out[28]: 1

```
# It will give the
reminder
```

In [29]:

```
45//4 # 45 floor
```

Out[29]: 11

```
division 4 # it
will give the
quotient
```

In [ ]: In [30]:

Conditional operations # if-else

if

```
10>5
```

Out[30]: True

In [31]:

```
10<5
```

Out[31]: False

In [ ]:
whenever it **is True** do some thing IF that **is True** then do some thing

when you enter after

```
 :                    that space is called
 it will take some    indentation
 space
In [ ]: In [ ]: In [33]:          # b=20
                                  # a+b
                                  # name='python' only


                                  name='python' # python is stored
if <condition>:                   in a variable name name=='Python'
 #########                        # we are checking that name equal
 ########                         to python
 #######
                                  #'python'=='Python' False

# I want to add a=10

Out[33]: False
                                 if yes:
In [47]:                          print("hello")

                                 hello
                                 In [ ]: In [48]:
```

```
In [41]:
```

```
In [42]: In [44]:
```

```
name='python'                    In [49]:
if name=='python':               name='python'
 print("hello")                  if name=='python':
                                  print("hello")
# backspace till : and
then do enter # use space        if True:
bar till you avoid the red        print("hello")
color # enter tab
# error name: indentation        if False:
                                  print("hello")
hello
                                 yes=True
                                 if yes:
if True:                          print("hello")
 print("hello")

hello                            print(1)
                                 print(2)
                                 ############################
if False:                        #### if True:
 print("hello")                   print("hello")
                                  print('hai')
yes=True                         ############################
                                 ######## print("bye")
```

```
1
2
hello
hai
bye
```

```
print(1)
print(2)
##########################
```

In [50]:

```
#### if False:
 print("hello")
 print('hai')
##########################
######## print("bye")
```

```
1
2
bye
```

```
########## if False:
 print("hello")
 print('hai')
############################
##################
print("bye")
############################
################### if
True:
 print("hello")
 print('hai')
```

```
1
2
bye
hello
hai
```

****
*** – 2**

if-else

In [52]: In [55]:

```
name='python'

if name=='python':
#'python'=='Python' if
False:  print("hello")

else:
 print("bye")
```

```
hello
```

```
print(1)
print(2)
############################
```

```
10%2==0
```

Out[55]: True

In [57]:

```
# wap ask the user enter a
number from keyboard # print
if it is even number or odd
number

# step-1:
num=eval(input("enter"))
# step-2: if <>:
# print("even")
#step-3: else:
# print("it is an odd")

num=eval(input("enter the
number:")) if num%2==0:
 print(f"{num} is an even")
else:
 print(f"{num} is an odd")
```

```
enter the number:25
```

```
        25 is an odd
```

In [ ]: