Reading the Input Data Dynamically in Python Program

=> In Python Programming to read the data dynamically form keyboard, we have two pre-defined function. => They are: 1.Input() 2.Input(Message)

=>Input:- This function used for any type of data from keyboard and placed in LHS varname and the value present in the LHS var is of type

> As Python programmer,we convert str type value into other type (if possible) by using typecasting techniques syntax: varname=input()

In [5]:
```
print("Enter the value")
mk=input()
print(mk, type(mk))
```

```
Enter the value
12.5 <class 'str'>
```

> Input(message): This function used for any type of data from keyboard and placed in LHS varname and the value present in the LHS

var is of type and with this function we get additionally user prompt message

> here message represents user-prompt mesage and whose type in str

In [9]:
```
mk=input("Enter the value:")
print(mk, type(mk))
```

```
12.5 <class 'str'>
```

In [15]:
```
mk=input("Enter the value:")
print(mk,type(mk))
cdoe=float(mk)
print(cdoe,type(cdoe))
```

```
001 <class 'str'>
1.0 <class 'float'>
```

In [21]:
```
x=float(input("Enter the value:"))
print(x,type(x))
```

```
42.03 <class 'float'>
```

In [4]:
```
"="*50
```

Out[4]:
```
'=================================================='
```

In [6]:
```
"3"*4
```

Out[6]:
```
'3333'
```

In [8]:
```
4*"3"
```

Out[8]:
```
'3333'
```

In [10]:
```
"4"*2*3
```

Out[10]:
```
'444444'
```

In [16]:
```
"4"*3+2 #typeError
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[16], line 1
----> 1 "4"*3+2

TypeError: can only concatenate str (not "int") to str
```

In [18]:
```
"4"*(3+2)
```

Out[18]:
```
'44444'
```

In [20]:
```
"p"+"4"*2
```

Out[20]:
```
'p44'
```

In [2]:
```
# Write a python programming which will is accept two numerical values and find the
```

In [22]:
```
x=float(input("Enter the first value"))
y=float(input("Enter the second value"))
z=x*y
print("-"*50)
print("val of x={}".format(x))
print("val of y={}".format(y))
print("Result ={}".format(z))
print("-"*50)
```

```
--------------------------------------------------
val of x=10.0
val of y=20.0
Result =200.0
--------------------------------------------------
```

In [28]:
```
# second model:
print("Enter the two numaric values")
x=float(input())
y=float(input())
print("mul of ({},{})={}".format(x,y,x*y))
```

```
Enter the two numaric values
mul of (10.0,20.0)=200.0
```

In [32]:
```
# model 3:
z=float(input("Enter the first value"))*float(input("Enter the second value"))
print("mul={}".format(z))
```

```
mul=200.0
```

In [38]:
```
# Model 4: (total code in single line only )
print("mul={}".format(float(input("Enter the first value"))*float(input("Enter the
```

```
mul=200.0
```

In [40]:
```
# Write a python program which will calculate area of a rectangle?
# Area of Rectangle=Length x Breadth
length=int(input("Enter Length"))
breadth=int(input("Enter breadth"))
area=length*breadth
print("-"*50)
print("area of length={}".format(length))
print("area of breadth={}".format(breadth))
print("area of rectangle={}".format(area))
print("-"*50)
```

```
--------------------------------------------------
area of length=30
area of breadth=30
area of rectangle=900
--------------------------------------------------
```

In [44]:
```
# Write a python program which will calculate area and perimeter of a circle?
r=float(input("Enter the Radius:"))
ca=3.14*r*r
cp=2*3.14*r
print("-"*50)
print("\tRadius={}".format(r))
print("\tarea of circule={}".format(ca))
print("\tperimeter of circle={}".format(cp))
print("-"*50)
```

```
--------------------------------------------------
        Radius=1.2
        area of circule=4.521599999999999
        perimeter of circle=7.536
--------------------------------------------------
```

In [50]:
```
# Decimal
print("\tRadius={}".format(r))
print("\tarea of circle=%0.2f" %ca)
print("\tperimeter of circle=%0.2f" %cp)
print("-"*50)
```

```
        Radius=1.2
        area of circle=4.52
        perimeter of circle=7.54
--------------------------------------------------
```

In [70]:
```
# round (1:00:00)
a=1234.56123
round(a,2)
```

Out[70]: 1234.56

In [72]:
```
# round (1:01:00)
a=1234.56123
round(a,-2)
```

Out[72]: 1200.0

In [74]:
```
# round (1:02:00)
a=1234.56123
round(a,-3)
```

Out[74]: 1000.0

In [66]:
```
print("\tRadius={}".format(r))
print("\tarea of circle=", round(ca,2))
print("\tperimeter of circle=", round(cp,2))
print("-"*50)
```

```
	Radius=1.2
	area of circle= 4.52
	perimeter of circle= 7.54
--------------------------------------------------
```

In [18]:
```
#Write a python program which will calculate simple interest and the total amount t
p=float(input("Enter the Principle amount:"))
t=float(input("Enter the Time:"))
r=float(input("Enter the Rate of Interest:"))
si=(p*t*r)/100
totamt=p+si
print("-"*50)
print("\tPrinciple amount:{}".format(p))
print("\tTime:{}".format(t))
print("\tRate of Interes:{}".format(r))
print("-"*50)
print("\tSIMPLE INTEREST={}".format(si))
print("\tTOTAL AMOUNT TO PAY={}".format(totamt))
print("-"*50)
```

```
--------------------------------------------------
	Principle amount:1000.0
	Time:2.0
	Rate of Interes:3.0
--------------------------------------------------
	SIMPLE INTEREST=60.0
	TOTAL AMOUNT TO PAY=1060.0
--------------------------------------------------
```

In [ ]: