**1. Calculate Area of a Circle**

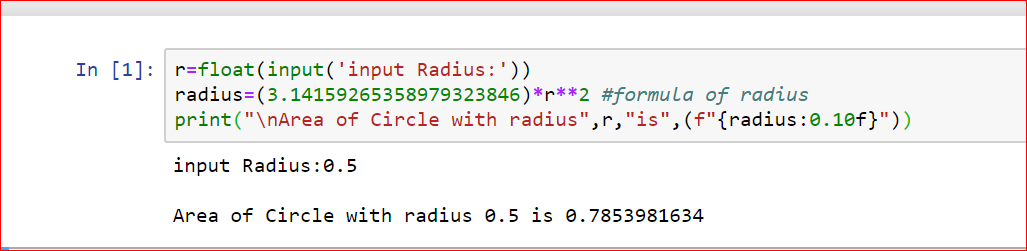
**¶**

**Write a Python program which accepts the radius of a circle from the user and compute the area.**

***Program Console Sample Output 1:***

***Input Radius: 0.5***

***Area of Circle with radius 0.5 is 0.7853981634***

******

## 2. Check Number either positive, negative or zero

#### Write a Python program to check if a number is positive, negative or zero

###### *Program Console Sample Output 1:*

###### *Enter Number: -1*

##### *Negative Number Entered*

###### *Program Console Sample Output 2:*

##### *Integer: 3*

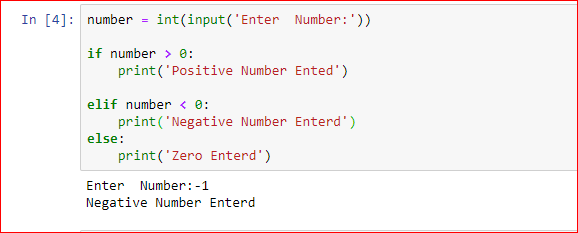
##### *Positive Number Entered*

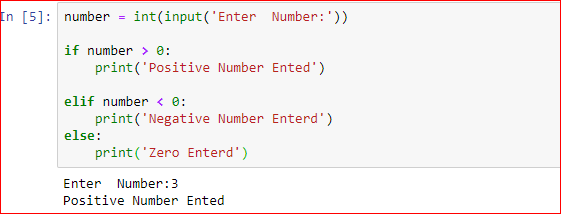
###### *Program Console Sample Output 3:*

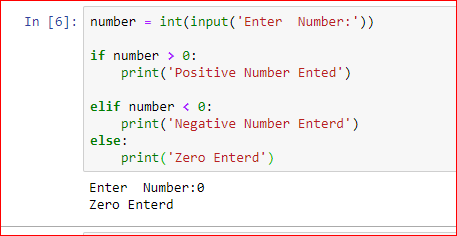
###### [*¶*](https://render.githubusercontent.com/view/ipynb?commit=c1aac35aaab7be1a8144c1875750a31a104696e1&enc_url=68747470733a2f2f7261772e67697468756275736572636f6e74656e742e636f6d2f75736d616e72616e6136382f70696169632d61737369676e6d656e742d312f633161616333356161616237626531613831343463313837353735306133316131303436393665312f41737369676e6d656e74253230312e6970796e62&nwo=usmanrana68%2Fpiaic-assignment-1&path=Assignment+1.ipynb&repository_id=192082049&repository_type=Repository#Program-Console-Sample-Output-3:)

##### *Integer: 0*

###### *Zero Entered*







## 3. Divisibility Check of two numbers

#### Write a Python program to check whether a number is completely divisible by another number. Accept

#### two integer values form the user

##### *Program Console Sample Output 1:*

###### *Enter numerator: 4*

###### *Enter Denominator: 2*

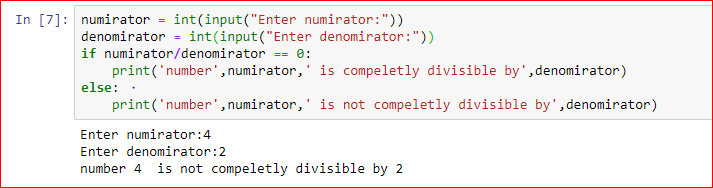
##### *Number 4 is Completely divisible by 2*

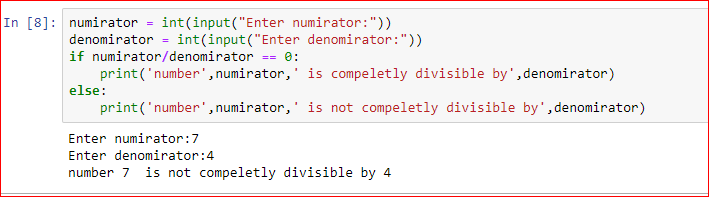
###### *Program Console Sample Output 2:*

##### *Enter numerator: 7*

##### *Enter Denominator: 4*[*¶*](https://render.githubusercontent.com/view/ipynb?commit=c1aac35aaab7be1a8144c1875750a31a104696e1&enc_url=68747470733a2f2f7261772e67697468756275736572636f6e74656e742e636f6d2f75736d616e72616e6136382f70696169632d61737369676e6d656e742d312f633161616333356161616237626531613831343463313837353735306133316131303436393665312f41737369676e6d656e74253230312e6970796e62&nwo=usmanrana68%2Fpiaic-assignment-1&path=Assignment+1.ipynb&repository_id=192082049&repository_type=Repository#Enter-Denominator:-4)

###### *Number 7 is not Completely divisible by 4*



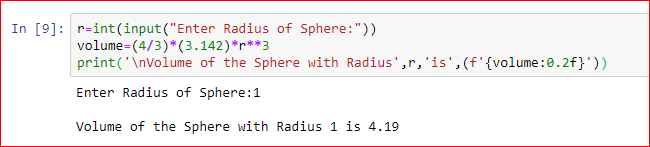


## 4. Calculate Volume of a sphere

##### *Write a Python program to get the volume of a sphere, please take the radius as input from user*

##### *Program Console Output:Enter Radius of Sphere: 1*

###### *Volume of the Sphere with Radius 1 is 4.18*



## 5. Copy string n times

#### Write a Python program to get a string which is n (non-negative integer) copies of a given

#### string.

##### *Program Console Output:*

##### *Enter String: Hi*

###### *How many copies of String you need: 6*

###### *6 Copies of Hi are HiHiHiHiHiHi*

###### 

## 6. Check if number is Even or Odd

### Write a Python program to find whether a given number (accept from the user) is even

### or odd, print out an appropriate message to the user

#### Program Console Output 1:

##### *Enter Number: 4*

###### *4 is Even*

#### Program Console Output 2:

##### *Enter Number: 9*

###### *9 is Odd*

###### 

###### 

## 7. Vowel Tester

### Write a Python program to test whether a passed letter is a vowel or not

#### Program Console Output 1:

##### *Enter a character: A*

###### *Letter A is Vowel*

#### Program Console Output 2:[¶](https://render.githubusercontent.com/view/ipynb?commit=c1aac35aaab7be1a8144c1875750a31a104696e1&enc_url=68747470733a2f2f7261772e67697468756275736572636f6e74656e742e636f6d2f75736d616e72616e6136382f70696169632d61737369676e6d656e742d312f633161616333356161616237626531613831343463313837353735306133316131303436393665312f41737369676e6d656e74253230312e6970796e62&nwo=usmanrana68%2Fpiaic-assignment-1&path=Assignment+1.ipynb&repository_id=192082049&repository_type=Repository#Program-Console-Output-2:)

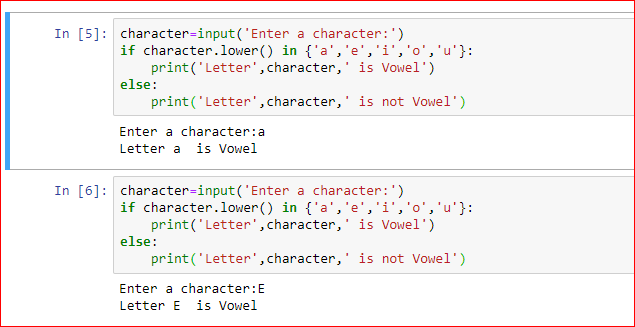
##### *Enter a character: e*

###### *Letter e is Vowel*

#### Program Console Output 2:

##### *Enter a character: N*

##### *Letter N is not Vowel*



###### 

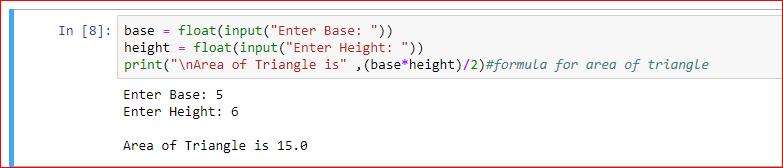
## 8. Triangle area

### Write a Python program that will accept the base and height of a triangle and compute

### the area

###### *Reference:*

<https://www.mathgoodies.com/lessons/vol1/area_triangle>



## 9. Calculate Interest

### Write a Python program to compute the future value of a specified principal amount,

### rate of interest, and a number of years

#### Program Console Sample 1:

#### *Please enter principal amount: 10000*

###### *Please Enter Rate of interest in %: 0.1*

###### *Enter number of years for investment: 5*

###### *After 5 years your principal amount 10000 over an interest rate of 0.1 % will be 16105.1*

###### 

## 10. Euclidean distance

### write a Python program to compute the distance between the points (x1, y1) and (x2, y2).

#### Program Console Sample 1:

###### *Enter Co-ordinate for x1: 2*

###### *Enter Co-ordinate for x2: 4*

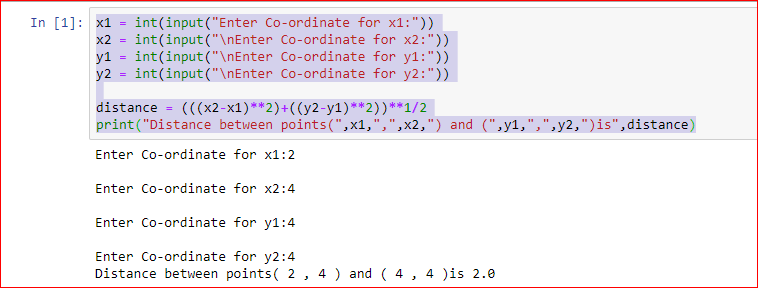
###### *Enter Co-ordinate for y1: 4*

###### *Enter Co-ordinate for y2: 4*

###### *Distance between points (2, 4) and (4, 4) is 2*

###### *Reference:*

<https://en.wikipedia.org/wiki/Euclidean_distance>



## 11. Feet to Centimeter Converter

### Write a Python program to convert height in feet to centimetres.

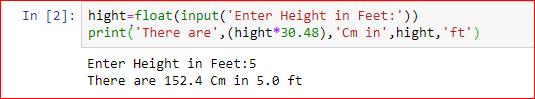
##### *Program Console Sample 1:*

###### *Enter Height in Feet: 5*

###### *There are 152.4 Cm in 5 ft*

###### *Reference:*

<https://www.rapidtables.com/convert/length/feet-to-cm.html>



## 12. BMI Calculator

### Write a Python program to calculate body mass index

##### *Program Console Sample 1:*

###### *Enter Height in Cm: 180*

###### *Enter Weight in Kg: 75*[*¶*](https://render.githubusercontent.com/view/ipynb?commit=c1aac35aaab7be1a8144c1875750a31a104696e1&enc_url=68747470733a2f2f7261772e67697468756275736572636f6e74656e742e636f6d2f75736d616e72616e6136382f70696169632d61737369676e6d656e742d312f633161616333356161616237626531613831343463313837353735306133316131303436393665312f41737369676e6d656e74253230312e6970796e62&nwo=usmanrana68%2Fpiaic-assignment-1&path=Assignment+1.ipynb&repository_id=192082049&repository_type=Repository#Enter-Weight-in-Kg:-75)

###### *Your BMI is 23.15*

###### 

## 13. Sum of n Positive Integers

### Write a python program to sum of the first n positive integers

#### Program Console Sample 1:

###### *Enter value of n: 5*

###### *Sum of n Positive integers till 5 is 15*

###### 

## 14. Digits Sum of a Number

### Write a Python program to calculate the sum of the digits in an integer

#### Program Console Sample 1:

##### *Enter a number: 15*

###### *Sum of 1 + 5 is 6*

#### Program Console Sample 2:

##### *Enter a number: 1234*

###### *Sum of 1 + 2 + 3 + 4 is 10*[*¶*](https://render.githubusercontent.com/view/ipynb?commit=c1aac35aaab7be1a8144c1875750a31a104696e1&enc_url=68747470733a2f2f7261772e67697468756275736572636f6e74656e742e636f6d2f75736d616e72616e6136382f70696169632d61737369676e6d656e742d312f633161616333356161616237626531613831343463313837353735306133316131303436393665312f41737369676e6d656e74253230312e6970796e62&nwo=usmanrana68%2Fpiaic-assignment-1&path=Assignment+1.ipynb&repository_id=192082049&repository_type=Repository#Sum-of-1-+-2-+-3-+-4-is-10)

###### 

###### 