**Program Name : Program to find root of f(x)=x^4-1 using Regula falsi Method.**

def f(x):

return(x\*\*4-1)

a=float(input("enter the first guess= "))

b=float(input("enter the second guess= "))

n=int(input("enter the no.of iteration= "))

c=(a\*f(b)-b\*f(a))/(f(b)-f(a))

i=0

if(f(a)\*f(b)<0):

while(i<n):

if(f(a)\*f(c)<0):

b=c

else:

a=c

c=(a\*f(b)-b\*f(a))/(f(b)-f(a))

i=i+1

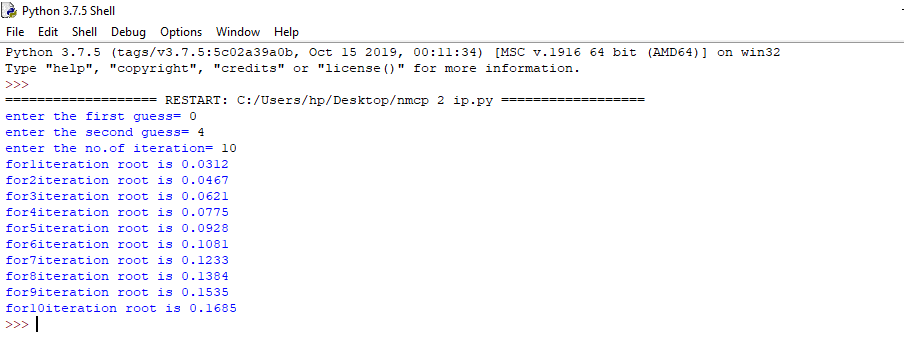
print(f"for{i}iteration root is {round(c,4)}")

else:

print("given guess value not lies int the bracket of the not")

print("try again with different guess value")

**output:**

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