**SIMPSON’S 1/3 RD RULE:**

**INPUT:**

def f(x):

return (1/1+x\*\*2)

n=int(input("Enter NO. of interval:="))

x0=float(input("Enter the value of lower limit="))

xn=float(input("Enter the value of upper limit="))

h=(xn-x0)/n

sum=f(x0)+f(xn)

for i in range(1,n):

k=x0+i\*h

if i%2==0:

sum=sum+2\*f(k)

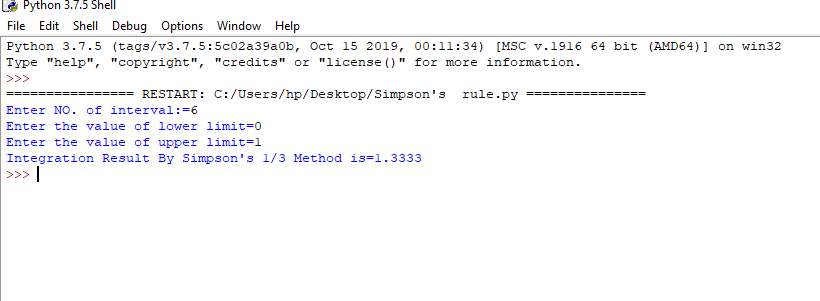
else:

sum=sum+4\*f(k)

y=(h/3)\*sum

print("Integration Result By Simpson's 1/3 Method is=%0.4f"%y)

**OUTPUT:**

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