Slip 1

def f(x):

return x\*\*3-4\*x-9

def false\_position(f,x0,x1,e):

x0=float(x0)

x1=float(x1)

e=float(e)

if x0\*x1>0.0:

print("initial guess do not bracket the root.try another values")

else:

step=1

while True:

x2=x0-(x1-x0)\*f(x0)/(f(x1)-f(x0))

print("iteration %d ,x2=%0.6f and f(x)=%0.6f" % (step,x2,f(x2)))

if x0\*x2<0:

x1=x2

else:

x0=x2

step=step+1

condition=abs(f(x2))>e

print("required root is:%0.8f x2")

false\_position(f,2,3,0.00001)

initial guess do not bracket the root.try another values

def f(x):

return x\*\*3-4\*x-9

false\_position(f,2,3,0.00001)

initial guess do not bracket the root.try another values

Q2

A)

def s13(a,b,n,f):

h=float(b-a)/n

I=f(a)+f(b)

for i in range(1,n):

k=a+i\*h

if i%2==0:

I+=2\*f(k)

else:

I+=4\*f(k)

I\*=h/3

return I

import math

def f(x):

return math.sin(x)

o/p: s13(0,math.pi,4,f)

2.0045597549844207

s13(0,math.pi,6,f)

2.0008631896735363

B)

def f(s):

s1=s

s2=s[::-1]

if s1==s2:

print("string is palindrome")

else:

print("string is not palindrome")

o/p: f("madam")

string is palindrome

f("radha")

string is not palindrome

Q3.

b)

def f1(s):

s1=s+"ing"

return s1

f1("read")

'reading'