Slip 4:

Que 1:

A:

def falsePosition(f, x0, x1, e):

x0 = float(x0)

x1=float(x1)

e=float(e)

if f(x0) \* f(x1) > 0.0:

print('gives guess value do not bracket the root')

print('try again with different values')

Else:

step = 1

condition = True

while condition:

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

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

if f(x0) \* f(x2) < 0:

x1=x2

else:

x0=x2

step step +1

condition = abs(f(x2)) > e

print('\nRequired root is: %0.8f' % x2)

def f(x):

return 3\*x\*\*2+4\*x-10

>>>falsePositon(f,0,1,0.00001)

Que 2:

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=I+2\*f(k)

else:

I=1+4\*f(k)

I= (h/3)\*I

return I

>>> def f(x):

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

>>> s13(0,pi, 6, f)

B:

import math

def relatively\_prime\_numbers(n, limit):

return [i for i in range(1, limit) if math.gcd(i, n) == 1]

result = relatively\_prime\_numbers(111, 150)

print(result)

Que 3:

A:

def f(s):

return s[-1]+s[1:-1]+s[0]

f("radha")

'aadhr'