#Bisection Method

def f(x):

y=x\*\*3-3\*x+1

return y

a=float(input("Enter the 1st value of interval : "))

b=float(input("Enter the 2nd value of interval : "))

n=int(input("Enter the no. of iterations : "))

for i in range (0,n):

c=(a+b)/2

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

b=c

elif (f(b)\*f(c)<0):

a=c

print("The next interval is" ,(a,b))

print("The root of the given equation after all iterations is : ",((a+b)/2))