

PROBLEM OF THE DAY VIT.C </POD>

QUESTION:

#Points on the line '''A line in 2-dimensional plane is represented as an equation a*x+b*y+c=0, where \hat{a} is called the coefficient of x, `b' is called as the coefficient of y and `c' is the constant term. Here a,b, c are all real numbers. A point in a 2-dimensional plane is represented as a pair of numbers (x1, y1), where x1 and y1 are both real numbers and x1 is called as the x-coordinate of the point , y1 is called as the ycoordinate of the point. A point (x1,y1) will lie on a line if $a^*(x1) + b$ (y1) + c = 0. Consider the line 2*x+3*y-1=0. T he point (-1,1) is a point on the line : 2*x+3*y-1=0 since 2*(-1)+3*(1)-1=0. Given an equation of the line a*x+b*y+c=0 and an integer n, write an algorithm and the subsequent code to print n points on the line such that the x-coordinates of all the n-points are the odd integers 1,3,5,7,... respectively. Among the n-points , x-coordinate of the first point is 1, x-coordinate of the second point is 3, xcoordinate of the third point is 5 and so on. Your code should print the y-coordinates of all the n-points that lie on the given line. All the real numbers are represented in the 2-decimal format. Let the equation of the line 2*x + 3 * y - 15 = 0, 3 points which lie on this line, are required such that the x-coordinate of the first point is 1, the x-coordinate of the second point is 3, x-coordinate of the third point is 5. Here 2*1+3*4.33-15=0. Hence, the point (1,4.33) lie on the line 2*3 + 3*(3.00) - 15 = 0. Hence, the point (3,3.00) lie on the line 2*5 + 3*(1.67) - 15 = 0. Hence the point (5, 1.67) lie on the line.

Hence, your program should output 4.33, 3.00. 1.67

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Note: To print the only decimal places of value of a variable answer, syntax to
be used in Python is
print(format(answer,'0.2f'))
Input format :
First line contains the coeeficient of x, a
Second line contains the coefficient of y, b
Third line contains the value of constant term , c
Fourth line contains the number of points required , n
Output format:
First line contains the y-coordinate of the first point
Second line contains y-coordinate of the second point
nth line contains y-coordinate of the n-th point
Example :
Input :
-15
Output :
4.33
3.00
1.67
```

SOLUTION:

```
a,b,c,n=int(input()) , int(input()),int(input())
#a*x+b*y+c=0
l=[]
for i in range(n+3):
    if (i%2)!=0:
        l.append(i)

for i in 1:
    x=i
    y=-((a*x + c)/b)
    print("{:.2f}".format(y))
```

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