Logo

STUDENT REPORT

DETAILS

Name

MEHABOOB S

Roll Number

KUB23MCA011

EXPERIMENT

Title

ROBO RACE

Description

There is a robot race happening between two robots named Robotop and Robocop. Both the robots reach the starting point to begin the race on a Circular track

Race starts at time T = 0 seconds. Robotop starts the race at T = Xth second and takes exactly N seconds to complete one lap. On the other hand. Robocop starts the race at T = Yth second and takes exactly M seconds to complete one lap.

Your task is to find and return an integer value, representing the least time T (in seconds) at which these two robots meet each other again at the starting point.

Sample Input:

2 3 1 4

Sample Output:

5

Explanation:

X=2, N=3, Y=1, N=4

Robotop starts at T=2 and completes one lap every 3 seconds. Robocop starts at T=1 and completes one lap every 4 seconds. The smallest point where both meet at the starting point is 5 seconds.

Source Code:

```
x,n,y,m=map(int,input().split())

if x>n:


 x,y=y,x
 n,m=m,n
ans=y-x
pos=0
for pos in range(n):
 if (ans%n+pos*m)%n==0:
   break
if pos!=n:
 print(y+pos*m)
```

RESULT

5 / 5 Test Cases Passed | 100 %