

Mysterious Point

ZPRAC-16-17-Lab2

[40 points]

Vikas, who works in a secret firm, has recently come across a mysterious problem. He defines a mysterious point as the point which divides a line into a ratio $m:n$. Please help him to find the coordinates of the mysterious point on the line joining two points $P1(x1,y1)$ and $P2(x2,y2)$.

Note: m and n are positive integers ($\leq 10^3$) while co-ordinates are real numbers ($\geq -10^3$ and $\leq 10^3$).

Input:

Input contains three lines.

First line contains m and n

Second line contains $x1$ and $y1$

Third line contains $x2$ and $y2$

Output:

X and Y (coordinates of the mysterious point upto 2 decimal places)

Example:

Input:

1 1

0.0 0.0

1.0 1.0

Output:

0.50 0.50