Penetrating Line

ZPRAC-16-17-Lab2

[40 points]
Rohan, a complete geek, always gets frustrated by geometry problems. Please help him by solving the following problem.
You are given equations of a line and a plane in 3D space:
Equation of a plane - $Ax+By+Cz=D$
Equation of a line - $(x,y,z)=(x_1,y_1,z_1)+\lambda(a,b,c)$

Write a program to find the point of intersection of the line and the plane.

Input:
First line of the input contains 4 space separated real numbers A, B, C and D for the plane.
Second line of the input contains 6 space separated real numbers x_1, y_1, z_1, a, b and c for the line.

Output:
Output the x, y and z coordinates of the point of intersection upto 2 decimal points.

Note: You can assume that the given line and plane intersect at a unique point.

Example:
Input:
0 0 1 0
0 0 0 0 0 1
Output:
Point of intersection (x,y,z) - (0.00, 0.00, 0.00)