This program solves for intersection of  
\[ y = a \cdot x + b \] \[ y = c \cdot x + d \]  
There is a special case for which this code fails  
Can you find and correct it?  
*/

#include <iostream>

int main() {
    double a;
    std::cout << "Please enter a" << std::endl;
    std::cin >> a;

    double b;
    std::cout << "Please enter b" << std::endl;
    std::cin >> b;

    double c;
    std::cout << "Please enter c" << std::endl;
    std::cin >> a;

    double d;
    std::cout << "Please enter d" << std::endl;
    std::cin >> d;

    double x = (d - b) / (a - c);
    double y = a * x + b;

    std::cout << "Lines intersect at " << x << " , " << y << std::endl;
    return 0;
}