// Programming Project 3 Part 1

import java.util.Scanner;

public class Population {
    public static void main(String[] args) {
        Scanner kb = new Scanner(System.in);
        double startingNumber, populationIncrease, numberOfDays;

        System.out.print("Enter the starting number of organisms: ");
        startingNumber = kb.nextInt();

        while (startingNumber < 2) {
            System.out.println("Invalid input. Starting population must be greater than 1.");
            System.out.print("Enter the starting number of organisms: ");
            startingNumber = kb.nextDouble();
        }

        System.out.print("Enter the daily population increase (as a percent): ");
        populationIncrease = kb.nextDouble();

        while (populationIncrease < 0) {
            System.out.println("Invalid input. Percentage must be a positive number.");
            System.out.print("Enter the daily population increase (as a percent): ");
            populationIncrease = kb.nextDouble();
        }

        System.out.print("Enter number of days: ");
        numberOfDays = kb.nextDouble();

        while (numberOfDays < 1) {
            System.out.println("Invalid input. Number of days must be greater than 0.");
            System.out.print("Enter number of days: ");
            numberOfDays = kb.nextDouble();
        }

        System.out.println("Population on day 1: "+ startingNumber);
        double i = 2;
        int j = 2;

        while (i <= numberOfDays) {
            startingNumber = startingNumber + (startingNumber * (populationIncrease / 100));
            i++;

            System.out.println("Population on day "+ j++ + ": "+ startingNumber);
        }
    }
}