Day 63 coding Statement : Balancing Weight

No play and eating all day makes your belly fat. This happened to Manish during the lockdown. His weight before the lockdown was w1 kg (measured on the most accurate hospital machine) and after M months of lockdown, when he measured his weight at home (on a regular scale, which can be inaccurate), he got the result that his weight was w2 kg (w2>w1).

Scientific research in all growing kids shows that their weights increase by a value between x1 and x2 kg (inclusive) per month, but not necessarily the same value each month. Manish assumes that he is a growing kid. Tell him whether his home scale could be giving correct results.

Input

The first and only line of each test case contains five space-separated integers w1, w2, x1, x2 and M.

Output

For each test case, print containing the integer 1 if the result shown by the scale can be correct or 0 if it cannot.

Sample Input : 1 2 1 2 2

2 4 1 2 2

4 8 1 2 2

5 8 1 2 2

1 100 1 2 2

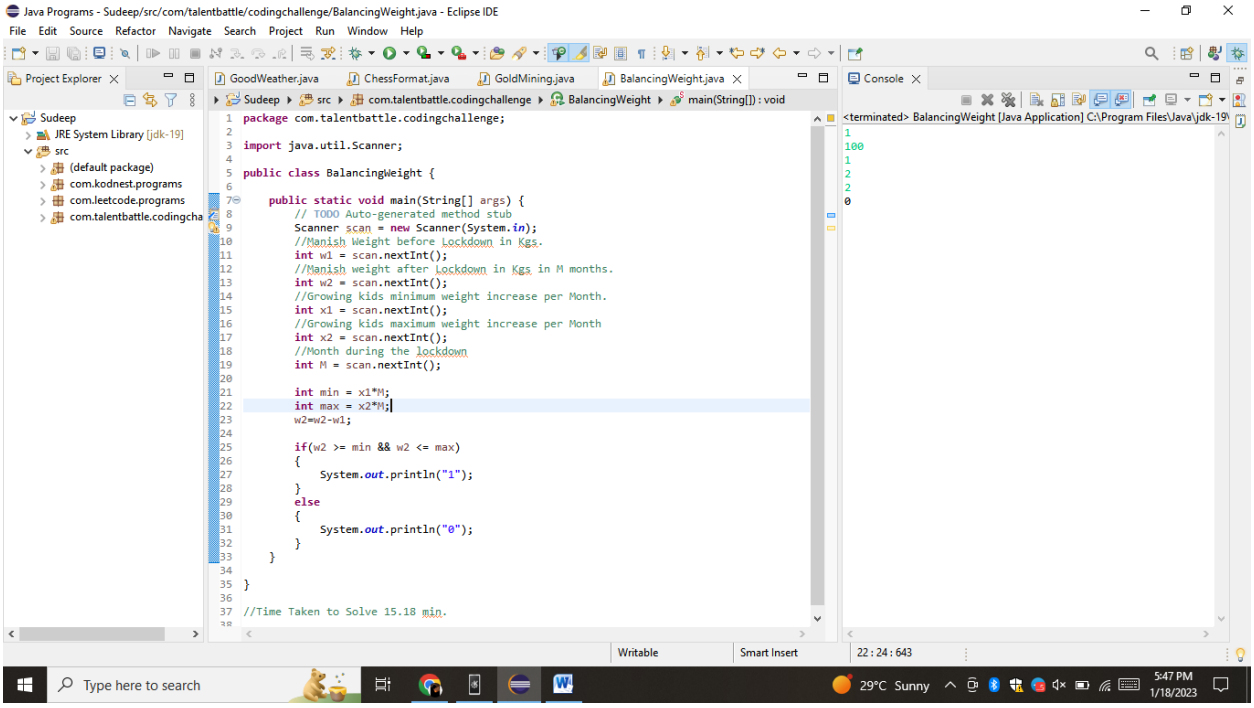
Sample Output 1 : 0

1

1

1

0


Java Programs - Sudeep/src/com/talentbattle/codingchallenge/BalancingWeight.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Sudeep
JRE System Library [jdk-19]
src
(default package)
com.kodnest.programs
com.leetcode.programs
com.talentbattle.codingcha
GoodWeather.java
ChessFormat.java
GoldMining.java
BalancingWeight.java
Sudeep src com.talentbattle.codingchallenge BalancingWeight main(String[]) : void
package com.talentbattle.codingchallenge;
import java.util.Scanner;
public class BalancingWeight {
public static void main(String[] args) {
// TODO Auto-generated method stub
Scanner scan = new Scanner(System.in);
//Manish Weight before Lockdown in Kgs.
int w1 = scan.nextInt();
//Manish weight after Lockdown in Kgs in M months.
int w2 = scan.nextInt();
//Growing kids minimum weight increase per Month.
int x1 = scan.nextInt();
//Growing kids maximum weight increase per Month
int x2 = scan.nextInt();
//Month during the lockdown
int M = scan.nextInt();
int min = x1*M;
int max = x2*M;
w2=w2-w1;
if(w2 >= min && w2 <= max)
{
System.out.println("1");
}
else
{
System.out.println("0");
}
}
}
//Time Taken to Solve 15.18 min.
Console
<terminated> BalancingWeight [Java Application] C:\Program Files\Java\jdk-19\
1
100
1
2
2
0
Writable
Smart Insert
22 : 24 : 643
Type here to search
29°C Sunny
5:47 PM
1/18/2023