Programming Basics Exam

Task 6. Gold mine

A group of enthusiasts tour various locations where there are gold mines. Your task is to help them by writing a program that yesaccepts the number of locations and expected average gold yield per day for one location. Forevery dayyou will get how much gold they got at the location. Check if they are achieved the expected yield for a given location or not.

Entrance:

Initially read from the consoleone number-number of locations-integer in the interval [1 .. 100]

For each locationare readtwo numbers, one per line:

- 1. Onthe firstline -expected average yield per day gold-real numberin the interval [0.00 .. 10000.00]
- 2. Onthe secondline -number of days in which to dig at the location-integer in the interval [1 .. 30]

For every dayis readableone number each:

-Gold mined for the day-real number in the interval [0.00 .. 1000.00]

Exit:

After the excavation of a location is completed, one line is printed as appropriate:

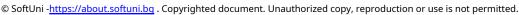
- Ifthe average yieldgold for the dayreaches or exceeds the expected average daily yield of gold:
 - o "Good job! Average gold per day: {average yield per day for the given location}."Ifthe
- average yieldgold for the dayis below the expected average daily yield of gold:
 - o "You need {gold that has not reached the expected average yield} gold."

The result should be formatted to the second decimal place.

Sample input and output

Entrance	Exit	Explanations
2 10 3 10 10 11 20 2 20 10	Good job! Average gold per day:10.33. You need5.00gold.	Selected2locations. First location: - expected average yield per day:10kilograms - the days when they will dig are3 Day 1: mining10kilograms Day 2: mining10kilograms Day 3: mining11kilograms The average yield is (10+10+11) /3=10.33kg. 10.33> =10=>the average yieldgold for the dayreach or exceeds the expected average daily yield of gold Second location: - expected average yield per day:20kilograms - the days when they will dig are2 Day 1: mining20kilograms Day 2: mining10kilograms



















		The average yield is (20+10) /2=15kg. 15<20=>the average yieldgold for the dayis below the expected average daily yield of gold and do not reach 20-15=5kg.
ntrance	Exit	Explanations
1	You need0.33gold.	She has been chosen1
5		location. First location:
3		- expected average yield per day:5kilograms
10		- the days when they will dig are3
1		Day 1: mining <mark>10</mark> kilograms
3		Day 2: mining1kilogram Day
		3: mining3kilograms
		The average yield is (10+1+3) /3=4.667kg.
		4.667<5=>the average yieldgold for the dayis under expected expected average yield per day gold and do not reach5-4.667=0.33kg.















(["1", You need 0.33 gold. She has been chosen1 **"5"**. location. First location: "3", - expected average yield per day:5kilograms "10", - the days when they will dig are3 "1", Day 1: mining 10 kilograms "(3"]) Day 2: mining1kilogram Day 3: mining3kilograms The average yield is (10+1+3)/3=4.66..7kg. 4.66..7<5=>the average yieldgold for the dayis under expected expected average yield per day gold and do not reach5-4.66..7=0.33kg.















