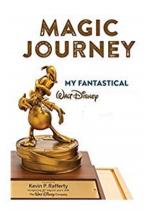# Disneyland Journey

You are planning a trip to Disneyland in the next year. Are you able to save money for it?

Create a program that checks if you can **save the money** for the Disneyland's journey. You have a **certain number of months** for which you can collect the money.

At the end of each month, you save **25% of the cost of the journey.**

At the beginning of every **odd** month (**except** the **first** one) you **spent 16%** of the money collected so far for clothes and shoes.

Every **4th (fourth)** month **at the beginning of the month** your boss gives you a bonus. It is **25%** of the money collected so far.

If you save enough money for the journey, calculate how much money will be left for the souvenirs. Then print the following:

"Bravo! You can go to Disneyland and you will have {money}lv. for souvenirs."

If the saved money is less you should calculate how much money you need more. Then print the following:

"Sorry. You need {money}lv. more."

Both numbers should be **formatted** to the **2nd decimal place**.

Input

- On the **1st line** you will receive how much the journey will cost – a **real number** in the range [500.0…10000.0]
- On the **2nd line** you will receive the **number of months** for which you have to collect money – an **integer number** in the range [1…12]

Output

- Print the output in the **format described above**.

Examples

Input	Output
1000 4	Bravo! You can go to Disneyland and you will have 87.50lv. for souvenirs.

Comments	

You need 1000 leva for the journey and you have 4 months to collect them. Every month you can save 1000 * 25% => 250 lv. So, to the end of the **1st** month you have **250 lv**. To the **end** of the **2nd** month - 250 + 250 -> **500 lv**. To the **begging** of the **3th** month (**odd month**) you spent **80 lv.** (500 * 16%) for clothes and shoes, then you save **250 lv**, so now you have **670 lv**. Last month is the **fourth month** and you save 670 + 167.5 (670 * 25%) + 25 = **1087.5 lv**. You have 1087.5 – 1000 = **87.5 lv.**, so you can go to the trip.

3265 3	Sorry. You need 1077.45lv. more.