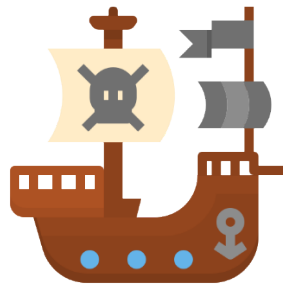


# Black Flag



*Pirates are invading the sea and you're tasked to help them plunder*

Create a program that checks if a **target plunder** is **reached**. First you will receive how many **days** the pirating lasts. Then you will receive how much the pirates **plunder for a day**. Last you will receive the **expected plunder** at the end.

Calculate how much **plunder** the pirates manage to **gather**. Each **day** they gather **plunder**. Keep in mind that every **third day** they attack more ships and they **add additional plunder** to their total gain which is **50% of the daily plunder**. Every **fifth day** the pirates encounter a warship and after the battle they **lose 30% of their total plunder**.

If the gained plunder is **more or equal** to the target print the following:

"Ahoy! {totalPlunder} plunder gained."

If the gained plunder is **less** than the target. Calculate the **percentage left** and print the following:

"Collected only {percentage}% of the plunder."

Both numbers should be **formatted** to the **2<sup>nd</sup> decimal place**.

## Input

- On the **1<sup>st</sup> line** you will receive the **days** of the plunder – an **integer number** in the range [0...100000]
- On the **2<sup>nd</sup> line** you will receive the **daily plunder** – an **integer number** in the range [0...50]
- On the **3<sup>rd</sup> line** you will receive the **expected plunder** – a **real number** in the range [0.0...10000.0]

## Output

- In the end print whether the plunder **was successful** or **not** following the format **described above**.

## Examples

Input	Output
5 40 100	Ahoy! 154.00 plunder gained.
Comments	
The days are 5 and the daily plunder is 40. On the third day the total plunder is 120 and since it is a third day, they gain an additional 50% from the daily plunder which adds up to 140. On the fifth day the plunder is 220, but they battle with a warship and lose 30% of the collected cargo and the total becomes 154. That is more than the expected.	
10 20 380	Collected only 36.29% of the plunder.