


<b>Initial Test</b>	
Programming Test 60 minutes	
Periode Berlaku Semester Ganjil 2023/2024 Valid on Odd Year 2023/2024	Software Laboratory Center Assistant Recruitment 24-1

## Soal

Case

### Clever Frog

There is a clever frog that wants to cross a river. Before crossing the river, there are stepping stones that the frog must traverse. The frog has a stamina of **N**, and the length of the river is **S**.

Each stepping stone has its **sign**. If the sign is a **number** from 0 to 9, when the frog steps on that stone, its **stamina decreases by i**. If the stone is marked with an **X**, the frog's stamina will be **restored** to its original level. The frog has **two options** when jumping: jumping **2 units** and jumping **3 units**. Determine the **optimal path** so that the frog can cross the river before running out of stamina.

### Input

The program will ask for multiple inputs:

- **S** (River length) **N** (Stamina)
- **I<sub>1</sub> ... I<sub>s</sub>** a stepping stone's value

### Constraint

$$1 \leq S \leq 10^7$$

$$1 \leq N \leq 10$$

$$In = ['0', '1', '2', '3', '4', '5', '6', '7', '8', '9', 'X']$$

## Output

If the frog successfully passes the river, print '**Berhasil**', otherwise, print '**Gagal**'.

## Example

Input	Output
10 6 4652X319X3	Berhasil
3 3 999	Gagal

## Explanation

In the first sample, we find that the **river length is 10**, and the path is '4652X319X3', and the frog has **6 stamina**. The frog has 2 possible ways: go to the **2<sup>nd</sup> rock**, where the value is **6**, or the **3<sup>rd</sup> rock**, where the value is **5**. If the frog wants to **stay alive**, it should go to the **3<sup>rd</sup> stone** and have **1 stamina left**. Then the frog should jump to the **5<sup>th</sup> stone** from the **3<sup>rd</sup> stone** to **regain its stamina**. After regaining stamina, the frog will choose the **7<sup>th</sup> stone** which uses less stamina than the **8<sup>th</sup> stone**. Last, that the frog will proceed to the **10<sup>th</sup> stone** and **pass the river**.