

Two Face on the high way

Heath is driving his car to Miami. Heath reached a point where he was confused and couldn't decide which road he should take. Lucky heath his friend Hary was with him who decided to help Heath

Hary : How many gallons of gas left in your tank ?

Heath : why ?

Hary : Beacuse depending on how much remaining I will decide which road we should take.

If the number of gallons greater then 50 then Hary will ask about the length of the 2 roads (in Km) (known that each gallon can go as far as 1.5 KM) Choose the road which the car can go through with

the current amount of gas. If both roads can be crossed choose the shortest one.

any other case you should decide to turn back and take neither of the two roads.

Output A if road 1 is chosen

Output B if road 2 is chosen

Output X otherwise

Input

G .. number of gallons (Integer) , $0 < G < 10,000$

R1 .. length of road number 1 (Float), $R1 > 0.0$

R2 .. length of road number 2 (Float), R2 >0.0

Output

One line with either A or B or X

Example

Input:

60 90 100

Output:

A

Input:

30

Output:

X