- **EASY**
- **Max Score: 30 Points**
-

Check if Possible to survive

You are a poor citizen of an island that has only one shop for groceries, which is open six days a week and is closed on Sundays.

The first day of the week is Monday. You can buy 'n' units of food from a day's work. Now each day, you need 'x' units of food to survive. You are making a boat to escape the island, which will require 'd' days to be made. You need to survive at least 'd' days on the island. You are given three integers n, x, and d.

Your task is to determine if you can escape the island

Input Format:

The first and the only line contains three space-separated integers n, x, and d.

Output Format:

Print YES if it is possible to survive on the island; else, print NO.

Example 1:

Input:

```
16 2 10
```

Output:

```
YES
```

Explanation:

One possible solution is to buy food on the first day (Monday). It's sufficient to eat from this food up to the 8th day (Monday) inclusive. On the 9th day (Tuesday), repurchase food and use the food to survive the 9th and 10th day.

Example 2:

Input:

`2 4 20`

Output:

`NO`

Explanation:

We can not survive as we make only two units of food per day, but we consume four units of food, so we will not be able to survive.

Constraints:

1<= n, x, d<=10^8

My code

// in java
import java.io.*;
import java.util.*;

```java
public class Main {
    static boolean isPossibleToSurvive(int n, int x, int d )
    {

        if(n<x) return false; //consumption for a day > earning for a day
        else{
            if(d<=6) return true; // if you only need to survive for
working days
            else if(6*n>=7*x) return true; // if you can survive one
whole week (7 days)
                    //on the amount of food earned in 6 days, you can
indefinitely survive
            else return false;
        }

    }

    public static void main(String args[]) {
        // your code here
        Scanner s=new Scanner(System.in);
        int n=s.nextInt();
        int x=s.nextInt();
        int d=s.nextInt();
        if(isPossibleToSurvive(n, x, d ))
            System.out.print("YES");
        else System.out.print("NO");
    }
}
```