Sure Winner

Alisa and Sony are playing a game. Then they have to pick an integer one by one between 1 to 10 i.e. integer should belong to $[1\ \ 10]$. The game stops when at any point of time the sum of the numbers chosen till that point is greater than or equal to an integer 'N'. At this point, the person who made the last contribution to the sum is the winner.

Alisa always starts the game. But this might give Alisa more chances to win the game. Therefore, along with integers in the range $[1\ \ 10]$, Sony can also choose integer 0 but only a fixed number of times. **You have to find out whether Sony can always win the game or not, no matter what Alisa choses in any of her turn**.

Note: Both players can choose any integer in the range $[1\ \ 10]$ any number of times according to their wish. Sony can also choose 0 but only a certain number of times.

Input Format

The first line of input contains a single integer t, denoting the number of test cases.

The only line of each test case contains two space separated integers N and X. If the sum is greater than or equal to N, the game stops. Here X represents the maximum number of times Sony can choose 0.

Constraints

$0 < t \leq 10^7$

$0 < N \leq 10^8$

$0 \leq X \leq 10$

Output Format

For each test case print `YES` if Sony can always win the game, otherwise print `NO`.

Sample Input 0

```
3
103 3
102 0
105 10
```

Sample Output 0

```
YES
NO
YES
```

Sample Input 1

```
2
8 1
11 0
```

Sample Output 1

```
NO
YES
```

Explanation 1

If $N = 8$, Alisa can say choose 8 in the 1^{st} turn itself. So Sony cannot always win.

If $N = 11$, Let Alisa choses $'a'$ then Sony can always choose a number $'b'$ such that $a + b = 11$. Therefore Sony will always win.