

Birthday Party

Mr. X's birthday is in next month. This time he is planning to invite N of his friends. He wants to distribute some chocolates to all of his friends after party. He went to a shop to buy a packet of chocolates. At chocolate shop, each packet is having different number of chocolates. He wants to buy such a packet which contains number of chocolates, which can be distributed equally among all of his friends. Help Mr. X to buy such a packet.

Input:

First line contains T, number of test cases. Each test case contains two integers, N and M. where N is number of friends and M is number number of chocolates in a packet.

Output:

In each test case output "Yes" if he can buy that packet and "No" if he can't buy that packet.

Constraints:

- $1 \leq T \leq 20$
- $1 \leq N \leq 100$
- $1 \leq M \leq 10^5$

SAMPLE INPUT

- 2
- 5 14
- 3 21

SAMPLE OUTPUT

- No
- Yes

Explanation

Test Case 1:

There is no way such that he can distribute 14 chocolates among 5 friends equally.

Test Case 2:

There are 21 chocolates and 3 friends, so he can distribute chocolates eqally. Each friend will get 7 chocolates.

In []:

In [2]:

```
def BirthdayParty(Friends,Chocolates):  
    if (Chocolates%Friends)==0:  
        print("Yes")  
    else:  
        print("No")  
  
Test=int(input())  
for x in range(0,Test):  
    TC=input().split()  
    BirthdayParty(int(TC[0]),int(TC[1]))
```

```
2  
5 14  
No  
3 21  
Yes
```

In []:

Seating Arrangement



So they got interested to know the seat number facing them and the seat type facing them. The seats are denoted as follows :

- Window Seat : WS
- Middle Seat : MS
- Aisle Seat : AS

You will be given a seat number, find out the seat number facing you and the seat type, i.e. WS, MS or AS.

INPUT

First line of input will consist of a single integer T denoting number of test-cases. Each test-case consists of a single integer N denoting the seat-number.

OUTPUT

For each test case, print the facing seat-number and the seat-type, separated by a single space in a new line.

CONSTRAINTS

- $1 \leq T \leq 105$
- $1 \leq N \leq 108$

SAMPLE INPUT

- 2
- 18
- 40

SAMPLE OUTPUT

- 19 WS
- 45 AS

In [3]:

```
WS1=[];WS2=[];MS1=[];MS2=[];AS1=[];AS2=[]
for x in range(1,109):
    if (x%6==0 and x%12!=0) or (x%6==1 and x%12!=1):
        WS1.append(x)
    elif (x%12==0 and x%6!=1) or (x%12==1 and x%6!=0):
        WS2.append(x)
    elif (x%12==2)or(x%12==11):
        MS1.append(x)
    elif(x%12==5)or x%12==8:
        MS2.append(x)
    elif x%12==3 or x%12==10:
        AS1.append(x)
    elif x%12==4 or x%12==9:
        AS2.append(x)
T=int(input())
for x in range(0,T):
    N=int(input())
    if N in WS1:
        if WS1.index(N)%2==0:
            print(WS1[WS1.index(N)+1],"WS")
        else:
            print(WS1[WS1.index(N)-1],"WS")
    elif N in WS2:
        if WS2.index(N)%2==0:
            print(WS2[WS2.index(N)+1],"WS")
        else:
            print(WS2[WS2.index(N)-1],"WS")
    elif N in AS1:
        if AS1.index(N)%2==0:
            print(AS1[AS1.index(N)+1],"AS")
        else:
            print(AS1[AS1.index(N)-1],"AS")
    elif N in AS2:
        if AS2.index(N)%2==0:
            print(AS2[AS2.index(N)+1],"AS")
        else:
            print(AS2[AS2.index(N)-1],"AS")
    elif N in MS1:
        if MS1.index(N)%2==0:
            print(MS1[MS1.index(N)+1],"MS")
        else:
            print(MS1[MS1.index(N)-1],"MS")
    elif N in MS2:
        if MS2.index(N)%2==0:
            print(MS2[MS2.index(N)+1],"MS")
        else:
            print(MS2[MS2.index(N)-1],"MS")
```

2
18
19 WS
40
45 AS