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Train Partner

Problem Code: **ANKTRAIN**

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Rahul and Rashi are off to the wedding of a close relative. This time they have to travel without their guardians. Rahul got very interested in the arrangement of seats inside the train coach.

The entire coach could be viewed as an arrangement of consecutive blocks of size 8.

Berth Number	Compartment
--------------	-------------

1 - 8	1
9 - 16	2
17 - 24	3
... and so on	

Each of these size-8 blocks are further arranged as:

1LB, 2MB, 3UB, 4LB, 5MB, 6UB, 7SL, 8SU
9LB, 10MB, ...
...
...

Here LB denotes lower berth, MB middle berth and UB upper berth.

The following berths are called **Train-Partners**:

3UB		6UB
2MB		5MB
1LB		4LB
7SL		8SU

and the pattern is repeated for every set of 8 berths.

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Input

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

Each of the next T lines contain a single integer N , the berth number whose neighbor is to be found out.

Output

The output should contain exactly T lines each containing the berth of the neighbor of the corresponding seat.

Constraints

Subtasks

Subtask #1 (50 points):

- $1 \leq T \leq 8$
- $1 \leq N \leq 8$

Subtask #2 (50 points):

- $1 \leq T \leq 100$
- $1 \leq N \leq 500$

Example

Input :

```
3
1
5
3
```

Output :

```
4LB
2MB
6UB
```

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Tags: [code_master01](#)

Date Added: 20-05-2015

Time Limit: 1 secs

Source Limit: 50000 Bytes

Languages: C, CPP14, JAVA, PYTH, PYTH 3.5, PYPY, CS2, PAS fpc, PAS gpc, RUBY, PHP, GO, NODEJS, HASK, SCALA, D, PERL, FORT, WSPC, ADA, CAML, ICK, BF, ASM, CLPS, PRLG, ICON, SCM qobi, PIKE, ST, NICE, LUA, BASH, NEM, LISP sbcl, LISP clisp, SCM guile, JS, ERL, TCL, PERL6, TEXT, SCM chicken, CLOJ, FS

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