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Fit in Data Type

Problem Code: **DATATYPE**

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Chef wants to store some important numerical data on his personal computer. He is using a new data type that can store values only from 0 till N both inclusive. If this data type receives a value greater than N then it is cyclically converted to fit into the range 0 to N. For example:

- Value N+1 will be stored as 0.
- ullet Value N+2 will be stored as 1.

and so on...

Given X, the value chef wants to store in this new data type. Determine what will be the actual value in memory after storing X.

Input Format

- ullet First line will contain T, number of testcases. Then the testcases follow.
- Each testcase contains a single line of input, two space separated integers
 N, X the maximum value a data type can store and the value Chef wants to
 store in the data type respectively.

Output Format

For each testcase, output in a single line the value which will be actually stored in memory.

Constraints

- $1 \le T \le 3000$
- $1 \le N \le 50$
- $0 \le X \le 50$

Sample Input 1 4

5 15 0 15 10 11 12 27 37 50 49

Sample Output 1 🖆

0 10 0 9 49

Explanation

My Submissions All Submissions (/START25C/status/DATATYP/IS,TART1245@status

Successful Submissions



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DATATYPE | FIT IN DATA T...



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See Discussions

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q=DATATYPE)

Test Case 1: The data type can store values from 0 to 15. If we try to put 0 in this data type, then the stored value will be the same, that is 0.

Test Case 2: The data type can store values from 0 to 15. If we try to put 10 in this data type, then the stored value will be the same, that is 10.

Test Case 3: The data type can store values from 0 to 11. If we try to put 12 in this data type, then the stored value will cyclically come back to 0. Hence the output is 0.

Test Case 4: The data type can store values from 0 to 27. If we try to put 37 in this data type, then the stored value will cyclically convert to 9. Hence the output is 9.

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Editorial: https://discuss.codechef.com/problems/DATATYPE

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Problem level: Unavailable

Date Added: 7-02-2022

Time Limit: 1 secs

Source Limit: 50000 Bytes

Languages: CPP17, PYTH 3,6, JAVA, C, CPP14, PYTH, PYP3,

CS2, ADA, PYPY, TEXT, PAS fpc, NODEJS, RUBY, PHP, GO, HASK, TCL, kotlin, PERL, SCALA, LUA, BASH, JS, rust, LISP sbcl, PAS gpc, BF, CLOJ, R, D, CAML, swift, FORT, ASM, FS, WSPC, LISP clisp, SQL, SCM guile, PERL6, ERL, CLPS, PRLG, SQLQ, ICK, NICE, ICON, COB, SCM chicken, PIKE, SCM qobi, ST,

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CodeChef was created as a platform to help programmers make it big in the world of **algorithms**, **computer programming**, and **programming contests**. At CodeChef we work hard to revive the geek in you by hosting a **programming contest** at the start of the month and two smaller programming challenges at the middle and end of the month. We also aim to have training sessions and discussions related to **algorithms**, **binary search**, technicalities like **array size** and the likes. Apart from providing a platform for **programming competitions**, CodeChef also has various algorithm tutorials and forum discussions to help those who are new to the world of **computer programming**.

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Here is where you can show off your **computer programming skills**. Take part in our 10 days long monthly coding contest and the shorter format Cook-off and Lunchtime **coding contests**. Put yourself up for recognition and win great prizes. Our **programming contests** have prizes worth up to INR 20,000 (for Indian Community), \$700 (for Global Community) and lots more CodeChef goodies up for grabs.

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