Team Up

Max. Marks: 25

You have created a new community for coders. The coders can request for x other coders from the community for taking part in a coding contest. E.g. if a coder wants to have 5 other coders he/she will put up a request of 5, and if he wants to participate alone, he doesn't request at all. Now for participating in different contests, the coders send friend requests to each other. some coders may want to participate in teams while some may want to participate alone (to be the hero!!) and sends no request. You are asked to make a list for each of these coders based on their requests. You are not sure whether it is actually possible. Thus before you proceed you would like to write a program, that given a list of N coders requesting wi, output "LIKE" if it is possible to make a list for each coder of length wi, or "DISLIKE" if some coder will have to get more or fewer partners than he/she requested for.

Notice: Being partners in a team is considered a reflexive relation.

Input The first line will contain a single integer T - the number of test cases to process. Because of I/O constraints, the sequence of requests is not given explicitly. Each of the T lines will consist of 5 integers N,a, b, c, m. These integers describe the sequence x0 = 0 xi+1 = (a*xi + b) % m The sequence of requests is wi = xi + c.

Output Write the answer - LIKE or DISLIKE- for each test case on a separate line.

Constraints: 1 <= T <= 5 0 <= N, a, b, c <= 10^5 1 <= m <= 10^5

Sample Input (Plaintext Link)

```
3
3 2 1 0 2
5 1 1 0 5
6 1 1 1 3
```

Sample Output (Plaintext Link)

```
LIKE
DISLIKE
LIKE
```

Explanation

In the first case you get the requests "0 1 1", and we can make coders 2 and 3 be team-mates.

In the second case you get the requests "0 1 2 3 4". No assignment that works, since coder 5 would have to be team-mates with everyone, but coder 1 doesn't want that.

Time Limit: 5.0 sec(s) for each input file.

Memory Limit: 256 MB

Source Limit: 1024 KB

Marking Scheme: Marks are awarded when all the testcases pass.

Allowed languages: C, CPP, CLOJURE, CSHARP, GO, HASKELL, JAVA, JAVASCRIPT, JAVASCRIPT_NODE, LISP, OBJECTIVEC, PASCAL, PERL, PHP, PYTHON, RUBY, R, RUST, SCALA


```c
#include<stdio.h>
#include<stdlib.h>

int x[1000000];

int cmp(const void *a, const void *b){
    return *(int*)a<*(int*)b?1:0;
};

int main(){
    int N,t,a,b,c,m,i,j,k,mark;
    scanf("%d",&t);
    x[0]=0;
    while(t--){
        scanf("%d%d%d%d%d",&N,&a,&b,&c,&m);
        mark=0;
        x[0]=c;
        for(i=1;i<N;i++){
            x[i]=(a*(x[i-1]-c)+b)%m;
            x[i]+=c;
            if(x[i]>=N){
                mark=1;
                break;
            }
        }
        if(mark==0){
```

```
27              qsort(x,N,sizeof(int),cmp);
28          }
29          for(i=0;i<N-1;i++){
30              if(x[i]==0){
31                  continue;
32              }
33              for(j=i+1;j<N;j++){
34                  if(x[j]>0){
35                      x[j]--;
36                      x[i]--;
37                  }
38                  if(x[i]==0){
39                      break;
40                  }
41              }
42              if(x[i]>0){
43                  mark=1;
44                  break;
45              }
46          }
47          if(x[N-1]>0){
48              mark=1;
49          }
50          if(mark==0){
51              printf("LIKE\n");
52          }
53          else{
54              printf("DISLIKE\n");
55          }
56      }
57      return 0;
58  }
59
```

Press ctrl-space for autocomplete suggestions.

Submit | Compile & Test | Provide custom input | ▶ Play Code (C)

SUBMISSION RESULT

Judge Environment

Submission ID: 3811523	Result	Score	Time (sec)	Memory (KiB)
3 seconds ago	25 Accepted	25	1.935041	4232

Language

C

	Result	Score	Time (sec)	Memory (KiB)

Input #1	Accepted	0.0	1.935041	4232

Compilation Log

No compilation log for this submission.

Tip: You can submit any number of times you want. Your best submission is considered for computing total score.

Your Rating:

COMMENTS (0)

Start Discussion...

Cancel Post

RECENT SUBMISSIONS

DEVELOPERS	RESULT	LANGUAGE
Sampreet...	1.935041	C
Shrirupa...	0.101218	C++
Rohit An...	0.100793	C++
Rohit An...	0.100512	C++
Shrirupa...	0.100637	C++
Rohit An...	0.0	C++
Sandip_J...	0.100887	C++
SOUPARNO...	0.100754	C++
Sandip_J...	0.100534	C++
Nikhil C...	0.100514	C++
Minesh G...	0.100564	C++
Deep Ban...	0.100661	C++
Minesh G...	0.0	C++
Arpan Mukherjee		C++