**Day before N days**

Input:

d = 4

n = 3

Output:

1

Explanation: 3 days before the 4th is 1

The approach of this function is to subtract n from d and then use the modulo operator % to wrap around to the beginning of the week if necessary.

First, n is subtracted from d and the result is stored in the variable result. Then, the modulo operator is used to get the remainder when result is divided by 7. This has the effect of "wrapping around" to the beginning of the week if result is negative or greater than 6.

Next, we check if result is negative. If it is, we add 7 to it to get a positive value. This is necessary because the day indices are expected to be between 0 and 6, and we want to avoid negative indices.

Finally, we print the value of result, which is the index of the day that is n days before the given day d.

C++

#include <bits/stdc++.h>

using namespace std;

void utility(int d, int n){

int result = (d - n) % 7;

if (result < 0) {

result += 7;

}

cout << result << endl;

}

int main() {

int t; cin>>t;

while(t-- > 0) {

int d, n;

cin>>d>>n;

utility(d, n);

cout<<endl;

}

}