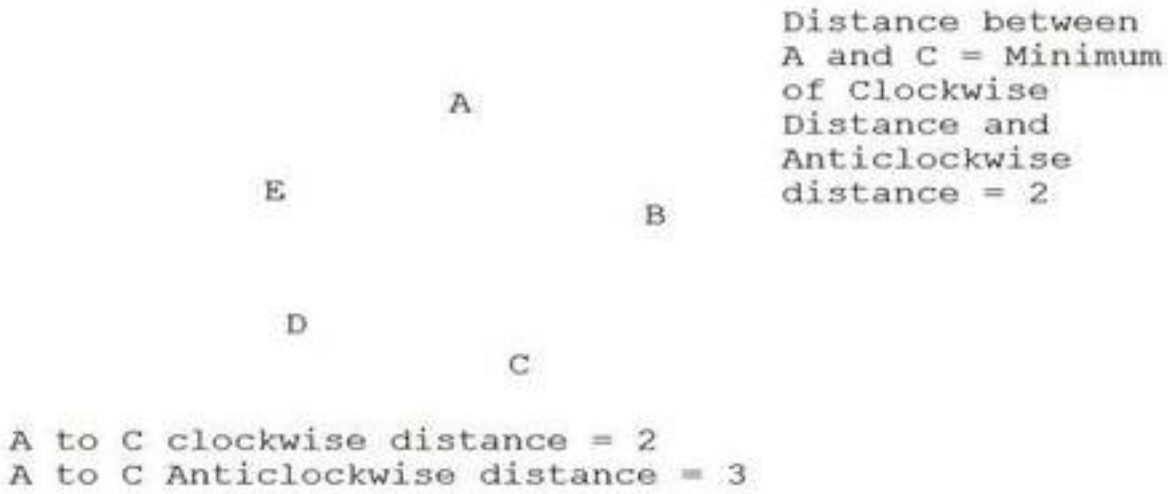# 12495 'C' for Count

In how many ways you can select K objects from N different circularly placed objects such that the selection does not contain any pair of distinct objects having distance less than D around the circle? Here distance is the minimum of clockwise and anticlockwise distance. Details in following figure:

Here, 5 objects {A, B, C, D, E} are placed circularly. Say, $K = 2$ and $D = 2$, then the 5 possible selections are {A, C}, {A, D}, {B, D}, {B, E}, {C, E}. A selection is considered to be different from the others if it contains at least 1 object which is not present in the other selection.

Input

First line of the input contains a positive integer T ($T \leq 5000$). Each of the following T lines contains three positive integers N ($1 \leq N \leq 1000$), K ($1 \leq K \leq N$) and D ($1 \leq D \leq 10$), respectively.

Output

For each case, print a line of the form 'Case $< x >$: $< y >$', where x is the case number and y is the number of ways *modulo* 1000000007 ($10^9 + 7$).

Sample Input

```
4
5 2 2
5 2 1
3 2 2
10 3 2
```

Sample Output

```
Case 1: 5
Case 2: 10
Case 3: 0
Case 4: 50
```