





Problem G

Jumping Frog

Time limit: 3 seconds

There was a cute little frog who live in a beautiful pond named Frogo. Frogo is a very smart frog! He can count and even understand algorithm! One day, you... Yes, you! As a programmer, wants to challenge Frogo to claim the best thinker of the entire... Pond.... Frogo then invite you to the pond for the challenge. After several days of journey, you finally arrive at the beautiful pond. You see a lot of stone and there are a lot of frogs jump in between those stones. Frogo then explain the challenge.

The challenge is simple, all of the frogs on the entire pond are great jumpers, they can jump by a maximum of 5 stones at once (From a stone to the 5th one)! But unfortunately because their jump is too powerful, they cannot jump between 2 stones. On every stone, there are several sacred gold coins! You have to get the most coin from "Start" to "Finish" sign to win the challenge!

After explaining the challenge, Frogo gives an example. There are 5 stones in between the start and the finish stone, they have 0,2,3,3,5 gold coins. So the layout look like this [Start] - 0 - 2 - 3 - 3 - 5 - [Finish]. And the most gold coins you can get is 8, by jumping from start to the third stone (which has 3 gold coins in it) and then leap to the stone before the finish line (which has 5 gold coins in it), and there you go, 8 coins!

Frogo then show you the secret pond that contains a hundred thousand, even more stones within some gold coins in it. You probably shocked by this reality, Frogo then smiles to you calmly and dare you to finish this challenge perfectly! (Or else you got a Wrong Answer from the judges:P)

Input:

0<T<100 number of test case.

For each test case, input: 4<=N<100000 as the number of stones from start to finish.

For every **N**, input **0<=G<=20** number of gold coins on the stone separated with white-space.

Output:

"Case T:" and the number of maximum coins for each test case.







| Sample Input : | Sample Output: |
|----------------|----------------|
| 3 | Case 1 :8 |
| 5 | Case 2 :33 |
| 02335 | Case 3 :14 |
| 9 | |
| 01123581321 | |
| 8 | |
| 2000100013 | |
| | |

Explanation Case 1:

The frog jumps to the third stone (3) and then leap to the last stone (5). So the total is 8

Explanation Case 2:

The frog jumps to the 2nd stone (1), 5th (3), 7th (8) and the last (21). So the total is 33

Explanation Case 3:

The frog jumps to the fourth stone (1) and the last (13). So the total is 14. The frog cannot jump to the first stone since it cannot jump between 2 stones.