Problem 1:

Time limit for each test case : 3 seconds

In a dystopian world, there has been a recession going on for a long time. Alice being unemployed for a long time seen many people resort to stealing and thievery due to these circumstances. Due to increase in thefts in the world, people have become more secure about it and have created special technology to prevent such thefts. One such technology is if a similar kind of asset is stolen from any 6 consecutive houses in a lane, it will result in alerting the police and the thief is caught. Also, a thief can only pick one type of asset from each house. There are only 3 types of assets in this world represented by 0,1 and 2. Alice found one lane of houses which she feels is ideal for attempting theft. Find out the maximum amount of money she can have. Note: For any person, the value of the asset he own is not the same. For example, if person 1 has asset of type 1, it can be of value 100, and the value for the same asset type (1 in this case) owned by another person could be 109.

Input :

Given an integer t, denoting number of test cases.
For each test case t:
Given an integer n, representing the number of houses in the lane.
For n next lines, 3 integers are given a1, a2 and a3 representing the value of the asset owned by that owner. A1 represents value of the asset of type 1 owned by the owner in house 1 and so on.

Output:

Print the maximum amount of money Alice can have.

Constraints:

1 <= N (number of houses in the lane) <= 10000
1 <= ai1, ai2, ai3 (value of an asset type owned by owner i)<= 1000000000

Sample input 1:

242 74 661
210 300 279
233 747 165
685 444 752
36 708 194
177 237 242
237 848 163
44 442 873
823 903 201
409 285 986

Sample output 1:
3599

Sample input 2:
2 7 5
4 9 4
4 3 1
0 3 4
9 2 5
6 6 2

Sample output 2:
23

Explanation:
In the second test case, since there are only 6 houses, Alice can only pick one type of asset from 3 houses out of 6. Maximum value can never exceed 23.