

Xtreme9.0 - Car Spark

John is a computer programmer and is highly known for his achievements in his field. In addition to being a passionate software professional, he is also passionate about motorcars and motorbikes.

So, after ending his successful and lengthy software career, he decides to take up his passion. He starts an organization by the name "Car Spark" (CS). CS is an organization from which you can rent luxury cars of your choice on an hourly rental basis.

CS would like to accept bookings for the weekend in advance, and then decide which bookings to process based on the profits that would be earned. When placing an order, customers quote the amount that they are willing to pay for that vehicle during that particular timespan. Since a car can only be given to one customer during a particular time period, CS must be careful about which bookings to process.

Initially CS has only one vehicle available for rent. To be the first hire for CS, you must develop a program to maximize revenue on bookings for this vehicle.

Input Format

Input begins with a single integer T , $1 \leq T \leq 100$, which denotes number of test cases.

Each test case begins with a single integer N , $1 \leq N \leq 2000$, which is the number of bookings John received.

The remainder of the test case consists of N lines containing three integers B_s , B_e , and A_i each separated by a space, where B_s is the booking start time, B_e is the booking end time, and A_i is the amount that the customer is willing to spend for the entire booking. Note that $0 \leq B_s < B_e \leq 48$ and $1 \leq A_i \leq 100000$.

Note: The car may only be rented during the weekend, meaning from 12:00 AM on Saturday to 12:00 AM on Monday. Since the two days in the weekend have 48 hours, 12 noon on a Sunday would be the (24+12) 36th hour. Similarly, if the booking start time is 10:00 PM on Saturday and the booking end time is 12:00 AM on Sunday, then B_s would be 22 and B_e would be 24.

Output Format

You are to output a single line for each test case, giving the maximum revenue John can make from the orders he received.

Sample Input

```
2
4
1 2 100
2 3 200
3 4 1600
1 3 2100
3
1 10 2000
2 5 100
6 9 400
```

Sample Output

```
3700
```

Explanation

For the first test case, for the time slot 1-3 maximum revenue John can make is 2100 ($\text{Max}(100+200, 2100)$) and for slot 3-4 he can make 1600. The maximum total revenue is 3700 ($2100+1600$).

Similarly for second test case, the maximum revenue he can generate is 2000.