# Visiting Customers

(Time Limit: 1 second)

**Problem Description**

* **English**

Mr. Salesman is planning his schedule of several meetings with customers between 00:00~24:00 on Sunday. However, some customers have overlapping time slots and he can only meet only one in any single time slot. The visit of each customer includes start time, finish time, and potential profit, and he must finish the entire meeting with that customer to earn the profit. If the finish time of one customer is equal to the start time of another, the time slots of these two customers are considered to be non-overlap. Mr. Salesman wants to earn maximum profit by meeting some or all of these customers. Given the time slots requested by all customers, please write a program to compute the maximum profit he can earn.

* **Chinese**

銷售員先生預定於星期日 00:00~24:00 拜訪一些客戶。然而，許多客戶可能跟他約了重疊的時間，而相同時間內他只能拜訪一位客戶，因此希望當天選擇拜訪的客戶潛在利益最大。假設每一客戶有拜訪起迄時間及一正整數表示潛在利益，全程完成拜訪一客戶之後，可得該客戶之潛在利益。注意若一客戶之結束時間剛好等於另一客戶之開始時間，則這二個客戶可視為沒有重疊．銷售員先生希望能夠拜訪部分或全部的客戶，以獲得最大利益．給予全部客戶的拜訪時段與利益，請寫一程式幫某甲選擇當天應拜訪的客戶，以達成最高利益。

**Technical Specification**

* **English**
  + The number of customers ranges from 1 to 100.
  + The start and finish time requested by each customer is represented in Arabic numbersin 24-hour clock, which range from 0 to 24. The start time is less than or equal to finish time for each customer.
  + The profit is a positive number ranging from 1 to 1000.
* **Chinese**
  + 客戶的數量介於1到100之間。
  + 每一位客戶會要求一個時段包含起始時間和結束時間，為 24 小時制，且皆為阿拉伯數字介於0到24之間。每一客戶之起始時間不超過結束時間，但二者可能相等．
  + 潛在利益為一個介於1到1000之正整數。

**Input Format**

* **English**

The first line contains the number of test cases, which is followed by each test case. The first line in each test case is the number of customers (*n*). The following *n* line stores the detail of each customer, where each line contains the starting time, finishing time, and profit, separated by a white space.

* **Chinese**

第一列包含一個正整數代表測資數量．每一筆測資開頭第一列有一個正整數，代表客戶之個數*n*。其後有 *n* 列，每一列代表一客戶，其資料依序為開始時間、結束時間、及預期利益。各項資料之間，以一個空白分隔。

**Output Format**

* **English**

For each test case, output the maximum total profit in each line.

* **Chinese**

每一行輸出每一筆測資之最大總利益。

**Example**

|  |  |
| --- | --- |
| **Sample Input:** | **Sample Output:** |
| 1  6 7 8 1 8 10 6 8 9 5 9 12 6 10 16 12 13 17 8 | 20 |