**We Want Justice**

Ongoing student protests in Bangladesh advocating improved road safety began on 29 July 2018. They were sparked by the deaths of two high-school students in Dhaka struck by a bus operated by an unlicensed driver racing another to collect passengers first. The incident impelled students to demand safer roads and stricter traffic laws. The demonstrations rapidly spread throughout the country. Various international organizations and renowned personalities expressed solidarity with the protests. The government of Bangladesh is trying to control the current situation. You are a senior programmer of BRTA (Bangladesh Road Transport Authority). BRTA has been told you to create a program for checking driving license.

Your program should follow this criteria’s:

A driving license is **valid** if the expired date of that license will be finished after **today** otherwise the license is **expired**. **Today is 12th August, 2018.**

The government of Bangladesh deliver a new rule for driver which is, a driver initially get **T** points. After getting each case he/she lost **1** **point**. If the driver has minimum **R** points then the driver is able to drive unless his/her license is **invalid** and he/she can't drive. The penalty money for only **n**th case is **(n**\***10)$.**That means 10$ for 1st case,20$ for 2nd case,30$ for 3rd case and go on. Suppose a driver lost 3 points, he/she should have to pay 60$.

**Input**:  
First line of the input file is an integer **t** (t < 15) which denotes the number of test case. For each test case follows two line.  
In first line there are three integers **D** (1<=D<=31), **M** (1<=M<=12) and **Y** (2000<=Y<=2050)- The license expired date's date, month, and year.  
The second line contains **T, R** and **K** (0<=T, R, K<=100) where T means the total point the driver initially has. R - Minimum point for driving. K - Number of points the driver already lost.

**Output:**Print the license is "**Valid**" , "**Invalid**" or "**Expired**"**.** If the answer is "**Valid**" then also show how many **penalty money** the driver should have to pay. Follow the sample input/output section.  
  
**Sample I/O**:

|  |  |
| --- | --- |
| Input | Output |
| 3  17 7 2017 15 5 2 25 3 2020 10 5 6 21 7 2021 20 5 3 | Case 1: Expired.  Case 2: Invalid.  Case 3: Valid.  Total Penalty Money: 60$. |

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