# Maximum Weighted Increasing Subsequence

(Time Limit: 1 second)

**Problem Description**

Given nonnegative integer sequence S and each element is associated with a positive weight. Find the maximum total weight of any increasing subsequence of S.

**Technical Specification**

* + The number of test cases is at most 10.
  + The length of S is at most 150000.
  + All integers are nonnegative 31-bit integers and each weight is at most 100.

**Input Format**

The test file contains several test cases. The first line is the number of test cases. For each test case, the first line is the length of S, and the second line contains the n integers separated by a space. The third line contains the n weights of all the elements.

**Output Format**

For each test case, output the maximum total weight of any increasing subsequence in one line.

**Example**

|  |  |
| --- | --- |
| **Sample Input:** | **Sample Output:** |
| 2  3  1 1 1  2 4 3  6  3 2 5 1 6 7  3 2 1 6 1 3 | 4  10 |