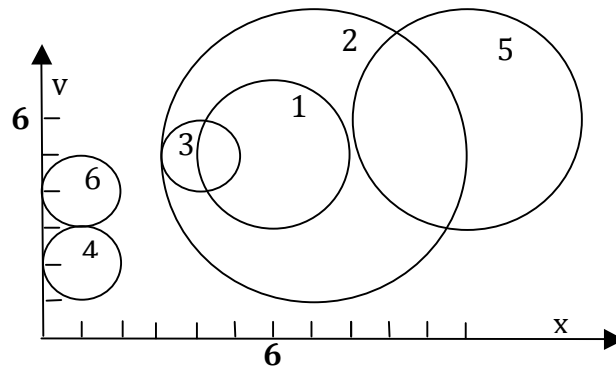


7- Inside Outside

Input File: InsideOutsideIn.txt

Nora has randomly distributed a collection of n circular disks, of various radii, onto a gymnasium floor. Each disk has a unique number printed on it, in the range from 1 to n . Given a disk number of interest, d , your task is to determine all of the disks that are completely inside of its perimeter, and all of the disks that are completely outside of it (share none of their area with disk d). For the disks shown below with $d = 2$, disks 1 and 3 are completely inside of disk 2, and disks 4, 5, and 6 are completely outside of disk 2. Note: a disk that is tangent to another disk can either be completely inside the other disk (e.g., disks 3 and 2 below), or completely outside of the other disk (e.g., disks 4 and 6 below).



Inputs:

The first line of input will be the number of gymnasium floors to consider, followed by one group of inputs for each floor. The first line in a grouping will contain two integers that represent the number of disks on the floor, n , followed by the disk number of interest, d . This will be followed by one line of input per disk that describes disk 1, disk 2, ..., and disk n . Each of these n lines contains three integers in this order: the x followed by the y coordinate of the center of the disk, followed by its radius. All inputs on a line are separated by a space.

Outputs:

There will be one line of output per gymnasium floor that contains the disk numbers *inside* the disk of interest in ascending order, followed by the disk numbers *outside* the disk of interest in ascending order. The outputs on a line will be separated by a space.

Sample Inputs (see the figure above)

```
2
6 2
6 5 2
7 5 4
4 5 1
1 2 1
11 6 3
1 4 1
6 6
6 5 2
7 5 4
```

4 5 1

1 2 1

11 6 3

1 4 1

Sample Outputs

1 3 4 6

1 2 3 4 5