

## Lab Assignment 3

### Experiment 1:

Aim of this assignment is storing a sequence of high score entries for a cricket game in an array. Information that need to add for computing the high score.

### Input

One component to include name of player scoring runs in a match. Another useful thing to include is number of ones, twos, threes, fours and sixes by a batsman. Input should contain Name of player, run score by that player in order of number of 1s,2s,3s,4s,6s.

### Adding an entry

Final ranking of players will be computed by assigning weights as

<u>Runs</u>	<u>*</u>	<u>weights</u>
1	*	1
2	*	2
3	*	4
4	*	6
6	*	8

Each player will be assigned a score according to above formula and a sequence of top 10 will be maintained. Once that limit of 5 reached, a new score only qualifies for the scorecard if it is strictly higher than the lowest high score on the board.

Keep in mind that not every entry will necessarily qualify as a high score. Once it has been determined that a new entry should be kept, there are two remaining tasks:

1. Properly update the number of entries, and
2. Place the new entries in the appropriate location, shifting entries with inferior scores as needed.

### Removing an entry

Suppose that some player gets his or her name on our high score list, but we later learn that cheating occurred. In this case, we might want to have a method that let us remove a game entry from the list of high scores from the scorecard.

### Output

Menu driven option should be display

//Program for batsman's ranking in cricket

Press

1. Insert a score of a new player. (Name, number of 1s,2s,3s,4s,6s)
2. Display scorecard. (display list of top 10 players.)
3. Delete a player from scorecard.

### Experiment 2:

Given a 2-dimensional array sort it vertically and horizontally, search for an element and return true if the element is present. (Algorithm, Code and Complexity)

Example

1	5	13	29
11	16	25	38
45	49	52	57
51	54	59	66