

1. Write a program which uses an `ArrayList` of `Strings` to store the names of the five top teams in the premier league. This program should prompt the user to enter a team name before adding it to the `ArrayList`. The program should then display each item on screen.
2. In the `ArrayList` API examine both `add()` methods. Modify your program so that the user can insert an element into the middle of the `ArrayList`. After adding five teams and displaying them on screen, prompt the user to enter the team name and the position (or index) they wish to insert into before carrying out the `add` operation. (What happens if the index is out of range? Fix this problem)

3. In the `ArrayList` API examine both `remove()` methods. Modify your program so that the user can remove one of the elements in the `ArrayList`. The program should prompt the user to user to enter the team name before carrying out the operation. Sample output:

```
Premier league top teams:  
Man City  
Man United  
Liverpool  
Tottenham Hotspur  
Chelsea
```

```
Enter a team to remove: Man United
```

```
After calling remove() Premier league top teams:  
Man City  
Liverpool  
Tottenham Hotspur  
Chelsea
```

4. Modify your program again so that the user can remove one of the elements in the `ArrayList` based on its location in the list. The program should prompt the user to enter the index or position they wish to remove from before carrying out the operation. (Your program should include appropriate validation i.e the index must be in range.)
5. Modify this program so that the following menu is continually displayed until the user selects 0. The user can choose to add, remove or view teams. Use appropriate error checking.

```
League Menu  
1. View all teams  
2. View one team (based on position  
3. Add a team (to end of list)  
4. Insert a team in list  
5. Remove a team (use name)  
6. Remove a team (based on position  
0. Exit
```

```
Enter your choice: 3
```