```
C:\Users\Marley\Documents\GitHub\java_cw_1\Q1>java RUGBY
What do you want to do?
1. Create new player
2. Display all loaded players
3. Search team
4. Delete player
5. Search address
6. Subset of players
7. Quit
```

This is the main menu of my program. By entering a number from 1-7 the user can select which item they want.

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10
What do you want to do?

1. Create new player

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6. Subset of players

7. Quit

Steven
What do you want to do?

1. Create new player

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3. Search address

6. Subset of players

7. Quit

Steven
What do you want to do?

1. Create new player

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4. Delete player

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7. Quit
```

Invalid answers are handled by displaying the menu again.

```
C:\Users\Marley\Documents\GitHub\java_cw_1\Q1>java RUGBY
What do you want to do?
1. Create new player
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5. Search address
6. Subset of players
7. Quit
1
Player name:
```

If the user selects to create a new player, they are individually prompted for each value.

```
Player name:
13323 124124
Player name:
```

If the user enters invalid data then they are prompted again.

```
C:\Users\Marley\Documents\GitHub\java_cw_1\Q1>java RUGBY
C: Users Marley Documents With
What do you want to do?
1. Create new player
2. Display all loaded players
3. Search team
4. Delete player
5. Search address
6. Subset of players
7. Ouit
7. Quit
                   John Smith
Name:
ID:
Tries:
                   RFU10101
                   33
                   Celtic Guys
CBD1010
Team:
Team ID:
Stadium:
Street:
                  Very Cool
Indeed
                   Chelmsford
Town:
Postcode: BOAAD
Name:
                   Alexander Smith
ID:
Tries:
                   RFU10023
                   Ø
                   Epic Gamers
EPG1002
Team:
Team ID:
Stadium:
                   Big Boy Stadium
23 Michael Road
Street:
Town:
                  Newcastle
Postcode: N1FAN
What do you want to do?
1. Create new player
2. Display all loaded players
3. Search team
4.
     Delete player
Search address
5.
     Subset of players
     Quit
```

If the user selects to display all loaded players, the full list of attributes for each player is displayed. It is the order of this list that should be considered when using the 'Delete player' command.

```
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What do you want to do?

1. Create new player

2. Display all loaded players

3. Search team

4. Delete player

5. Search address
     Subset of players
7. Quit
Team name:
Guy
Name:
                   John Smith
ID:
Tries:
                   RFU10101
                   33
                  Celtic Guys
CBD1010
Team:
Team ID:
Stadium:
Stadium: Very Cool
Street: Indeed
Town: Chelmsford
Postcode: BOAAD
What do you want to do?
1. Create new player
2. Display all loaded players
3. Search team
     Delete player
Search address
4.
     Subset of players
     Quit
```

If the user chooses to search by team it displays all players whose team name contains the specified substring (case sensitive).

```
3
Team name:
oooo
No results found
```

The user is informed if no results are found.

```
John Smith
RFU10101
Name:
ID:
Tries:
                33
                Celtic CBD1010
Team:
                           Guys
Team ID:
Stadium:
                Very Cool
Indeed
Chelmsford
BOAAD
Street:
Town:
Postcode:
                Alexander Smith
Name:
ID:
Tries:
                RFU10023
                Ø
                Epic Ga
EPG1002
Team:
                        Gamers
Team ID:
Stadium:
Street:
                Big Boy Stadium
23 Michael Road
Town:
                Newcastle
Postcode: N1FAN
What do you want to do?
1. Create new player
2. Display all loaded players
3. Search team
4. Delete player
5. Search address
6. Subset of players
7. Quit
Position in list to delete:
Saved!
What do you want to do?
    Create new player
Display all loaded players
Search team
    Delete player
Search address
4.
6. Subset of players
7. Quit
Name:
                Alexander Smith
ID:
                RFU10023
Tries:
                Ø
                Epic Gamers
EPG1002
Big Boy Stadium
23 Michael Road
Team:
Team ID:
Stadium:
Street:
                Newcastle
N1FAN
Town:
Postcode:
```

If the user chooses to delete a player they are then prompted for the position in list. Although the array that stores players is 0-indexed, the user is expected to use 1 for first, 2 for second etc.

```
4
Position in list to delete:
100
Invalid position
```

If the user inputs an invalid position, they are notified.

```
What do you want to do?

1. Create new player

2. Display all loaded players

3. Search team

4. Delete player

5. Search address

6. Subset of players

7. Quit

5

Address to query:
chelm
Very Cool
Indeed
Chelmsford
BØAAD
What do you want to do?

1. Create new player

2. Display all loaded players

3. Search team

4. Delete player

5. Search address

6. Subset of players

7. Quit
```

If the user chooses to search for an address they are prompted for a string to query. If the string matches any address element of any player, that address is then printed to the screen. The search is case-insensitive.

```
What do you want to do?
     Create new player
Display all loaded players
Search team
     Delete player
Search address
Subset of players
4.
7. Quit
Lower bound:
Upper bound:
Name:
                  Alexander Smith
ID:
Tries:
                  RFU10023
                  Epic Gamers
EPG1002
Big Boy Stadium
23 Michael Road
Team:
Team ID:
Stadium:
Street:
Town:
                  Newcastle
Postcode: N1FAN
What do you want to do?
1. Create new player
2. Display all loaded players
3. Search team
     Delete player
Search address
Subset of players
     Quit
```

If the user chooses to view a subset of players, the enter the lower bound (inclusive) and upper bound (exclusive) and then all players in that range are displayed. These bounds are from the perspective of the zero-indexed array.

```
What do you want to do?

1. Create new player

2. Display all loaded players

3. Search team

4. Delete player

5. Search address

6. Subset of players

7. Quit

7

C:\Users\Marley\Documents\GitHub\java_cw_1\Q1>
```

By entering 7 the user can exit the program.