DSA MINOR PROJECT DESCRIPTION

// Base Class

```
class Date {
private int day;
private String month;
private int year;
```

// Constructor

```
public Date(int day, String month, int year) {
this.day = day;
this.month = month;
this.year = year;
}
```

// Return Type Method

```
public String toString() {
return day + "-" + month + "-" + year;
}

}
```

// Second Base Class

```
class Member {
```

// inputing

```
    private int ID;
    private String lastName;
    private String firstName;
    int handicap;
```

```java
    private char gender;
    private String team;
    private String memberType;
    private int coach;
    private long phone;
    private Date joinDate;
```

// Constructor

```java
public Member(int ID, String lastName, String firstName, int handicap,
char gender, String team, String memberType, int coach, long phone,
Date joinDate) {
this.ID = ID;
this.lastName = lastName;
this.firstName = firstName;
this.handicap = handicap;
this.gender = gender;
this.team = team;
this.memberType = memberType;
this.coach = coach;
this.phone = phone;
this.joinDate = joinDate;
}
```

// Displaying the Data

```java
public void display() {
System.out.print(ID+"\t"+lastName+"\t"+firstName+"\t"+handicap+"\t"+
System.out.println();
}
```

// Checking by return method of Handicap

```java
public boolean isSenior() {
return (handicap < 12);
}
```

// Checking by return method of Female Employee

```java
public boolean isFemale() {
return (gender == 'F');
}
```

// Checking by return method of TeamB

```java
public boolean isTeamB() {
return (team != null && team.equals("TeamB"));
}
```

// Checking by return method of Handicap

```java
public boolean joinedBefore(Date date) {
return joinDate.toString().compareTo(date.toString()) < 0;
}
}
```

// MAIN CLASS

```java
public class Question {
```

// MAIN METHOD

```java
public static void main(String[] args) {
```

// CALLING OBJECT

```java
Member[] members = {
new Member(118, "McKenzie", "Melissa", 30, 'F', null, "Junior", 153, 963270, new Date(28, "May", 2005)),
new Member(138, "Stone", "Michael", 30, 'M', null, "Senior", 0, 983223, new Date(31, "May", 2009)),
new Member(153, "Nolan", "Brenda", 11, 'F', "TeamB", "Senior", 0, 442649, new Date(12, "Aug", 2006)),
new Member(176, "Branch", "Helen", 0, 'F', null, "Social", 0, 589419, new Date(6, "Dec", 2011)),
new Member(178, "Beck", "Sarah", 0, 'F', null, "Social", 0, 226596, new Date(24, "Jan", 2010)),
new Member(228, "Burton", "Sandra", 26, 'F', null, "Junior", 153, 244493, new Date(9, "Jul", 2013)),
new Member(235, "Cooper", "William", 14, 'M', "TeamB", "Senior", 153, 722954, new Date(5, "Mar", 2008)),
new Member(239, "Spence", "Thomas", 10, 'M', null, "Senior", 0, 697720, new Date(22, "Jun", 2006)),
new Member(258, "Olson", "Barbara", 16, 'F', null, "Senior", 0, 370186, new Date(29, "Jul", 2013)),
new Member(286, "Pollard", "Robert", 19, 'M', "TeamB", "Junior", 235, 617681, new Date(13, "Aug", 2013)),
new Member(290, "Sexton", "Thomas", 26, 'M', null, "Senior", 235, 268936, new Date(28, "Jul", 2008)),
new Member(323, "Wilcox", "Daniel", 3, 'M', "TeamA", "Senior", 0, 665393, new Date(18, "May", 2009)),
new Member(331, "Schmidt", "Thomas", 25, 'M', null, "Senior", 153, 867492, new Date(7, "Apr", 2009)),
new Member(332, "Bridges", "Deborah", 12, 'F',null, "Senior", 235, 279087, new Date(23, "Mar", 2007)),
new Member(339, "Young", "Betty", 21, 'F', "TeamB", "Senior", 0, 507813, new Date(17, "Apr", 2009)),
new Member(414, "Gilmore", "Jane", 5, 'F', "TeamA", "Junior", 153, 459558, new Date(30, "May", 2007)),
new Member(415, "Taylor", "William", 7, 'M', "TeamA", "Senior", 235, 137353, new Date(27, "Nov", 2007)),
new Member(461, "Reed", "Robert", 3, 'M', "TeamA", "Senior", 235, 994664, new Date(5, "Aug", 2005)),
new Member(469, "Willis", "Carolyn", 29, 'F',null, "Junior", 0, 688378, new Date(14, "Jan", 2011)),
new Member(487, "Kent", "Susan", 0, 'F', null, "Social", 0, 707217, new Date(7, "Oct", 2010)),
};
```

// PRINTING THE DATA

```java
System.out.println("Members joined before 07-Apr-09:");
System.out.println("Member_Id \t lastName \t firstName \t Handicap \t Gender \t Team \t Member Type \t Coach \t Phone \t Join Date ");
for (Member member : members) {
if (member.joinedBefore(new Date(7, "Apr", 2009))) {
member.display();
}
}

System.out.println("Senior members with handicap less than 12:");
System.out.println("Member_Id \t lastName \t firstName \t Handicap \t Gender \t Team \t Member Type \t Coach \t Phone \t Join Date ");
for (Member member : members) {
if (member.isSenior() && member.handicap < 12) {
member.display();
}
}
System.out.println("Female senior members of TeamB:");
System.out.println("Member_Id \t lastName \t firstName \t Handicap \t Gender \t Team \t Member Type \t Coach \t Phone \t Join Date ");
for (Member member : members) {
if (member.isSenior() && member.isFemale() && member.
isTeamB()) {
member.display();

}
}
}
}
```