## **SIKSHA 'O' ANUSANDHAN**

#### **DEEMED TO BE UNIVERSITY**

Admission Batch: 2023-27 Session: 2023-24

### **Minor-Project**

# Data Structure and Algorithms (CSE 2001)

#### Submitted by

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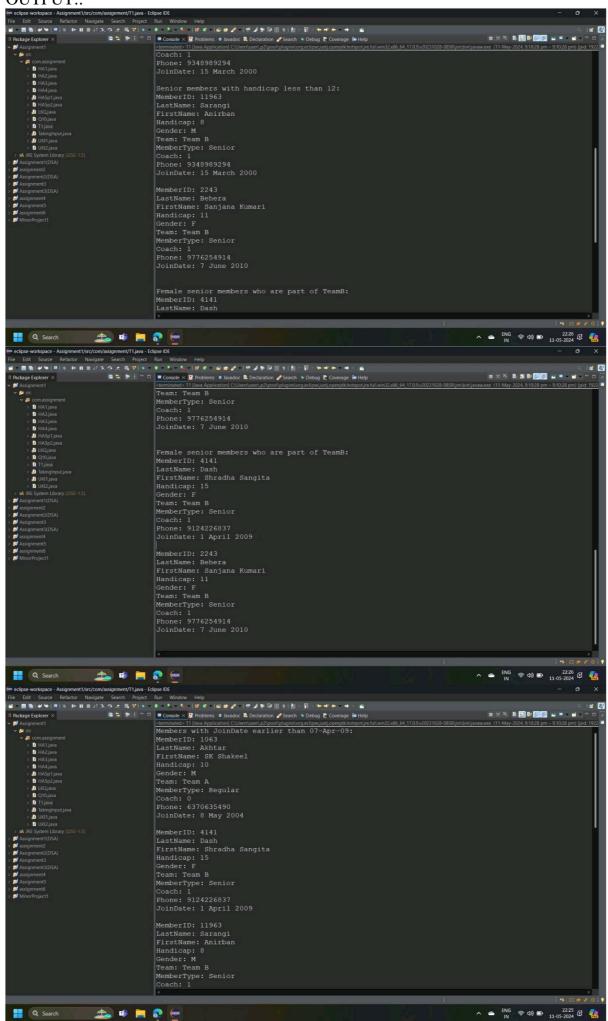
# **Department of Computer Science & Engineering**

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```
public String getTeam() {
   return Team;
public char getGender() {
   return Gender;
public Date getJoinDate() {
    return JoinDate;
 ublic Date(int day, String month, int year) {
   this.day = day;
   this.month = month;
   this.year = year;
public String getMonth() {
    return month;
public int getYear() {
   return year;
   } else if (date1.getYear() == date2.getYear()) {
   if (date1.getMonth().compareTo(date2.getMonth()) < 0) {</pre>
       return true;
} else if (date1.getMonth().equals(date2.getMonth())) {
   return date1.getDay() < date2.getDay();</pre>
```

#### **OUTPUT:.**



# **Description of Java Code: Member Information**

#### Introduction

This Java program manages information about club members using the Member class. It also includes a Date class to handle date-related operations. Let's dive into the details.

#### **Process Documentation**

#### 1. Member Class:

- The Member class represents club members and contains the following attributes:
  - MemberID: Unique identifier for each member.
  - LastName and FirstName: Member's last name and first name.
  - Handicap: Handicap score (integer value).
  - Gender: 'M' for male, 'F' for female.
  - Team: Team to which the member belongs.
  - MemberType: Type of membership (e.g., "Regular" or "Senior").
  - Coach: Coach ID (0 if not applicable).
  - Phone: Member's phone number.
  - JoinDate: Date when the member joined the club.
- The constructor initializes these attributes.
- The display() method prints member details.

#### 2. Date Class:

- The Date class represents a date with day, month, and year.
- It has fields for day, month, and year, along with getter methods.
- The toString() method returns a formatted string representation of the date.

#### 3. Main Method:

- In the main() method:
  - We create instances of Date (e.g., joinDate1, joinDate2, etc.) and Member (e.g., members[0], members[1], etc.).
  - We display information about members based on specific conditions:
    - Members who joined before 7th April 2009.
    - Senior members with a handicap less than 12.
    - Female senior members in Team B.

## **Input and Output**

#### • Input:

- Member details (ID, name, handicap, gender, team, etc.).
- Join dates (e.g., 8th May 2004, 1st April 2009, etc.).

#### Output:

• Displayed information for each member meeting the specified criteria.

# **Sample Execution**

#### 1. Members with JoinDate earlier than 07-Apr-09:

MemberID: 1063 LastName: Akhtar FirstName: SK Shakeel

Handicap: 10 Gender: M Team: Team A

MemberType: Regular

Coach: 0

Phone: 6370635490 JoinDate: 8 May 2004

MemberID: 4141 LastName: Dash

FirstName: Shradha Sangita

Handicap: 15 Gender: F Team: Team B MemberType: Senior

Coach: 1

Phone: 9124226837 JoinDate: 1 April 2009

#### 2. Senior members with handicap less than 12:

MemberID: 1063 LastName: Akhtar FirstName: SK Shakeel

Handicap: 10 Gender: M Team: Team A

MemberType: Regular

Coach: 0

Phone: 6370635490 JoinDate: 8 May 2004

#### 3. Female senior members who are part of Team B:

MemberID: 4141 LastName: Dash

FirstName: Shradha Sangita

Handicap: 15
Gender: F
Team: Team B
MemberType: Senior

Coach: 1

Phone: 9124226837 JoinDate: 1 April 2009

#### Conclusion

This program effectively manages member information and demonstrates the use of classes and conditional filtering. Feel free to explore further enhancements or optimizations!