

JAVA PROGRAMMING

LA - 6

Q1 Write a program to demonstrate the knowledge of students in File handling. Eg., Define a class 'Donor' to store the below-mentioned details of a blood donor. Name, Age, Address, Contact number, blood group, date of the last donation Create 'n' objects of this class for all the regular donors at Vellore. Write these objects to a file. Read these objects from the file and display only those donors' details whose blood group is 'A+ve' and had not donated for the recent six months.

CODE:

```
import java.util.*;

import java.io.*;

class donor {

    String name;

    int Age;

    String Address;

    String BloodGroup;

    String last_donation_date;

    public donor(String name, int Age, String Address, String BloodGroup, String last_donation_date) {

        this.name = name;

        this.Age = Age;

        this.Address = Address;

        this.BloodGroup = BloodGroup;

        this.last_donation_date = last_donation_date;

    }

}

public class assignment {

    public static void main(String[] args) {

        donor[] d1 = new donor[10];

        d1[0] = new donor("Shifa", 24, "Gurgaon", "O+ve", "16/12/2024");

        d1[1] = new donor("Deep", 26, "Thane", "AB+ve", "24/6/2024");

        d1[2] = new donor("Parvi", 27, "Chandigarh", "B+ve", "30/9/2024");

        d1[3] = new donor("Satvik", 28, "lahore", "O+ve", "5/6/2023");

        d1[4] = new donor("Shagun", 30, "Patna", "A+ve", "23/6/2023");

        d1[5] = new donor("Shivin", 31, "Bangalore", "AB+ve", "3/2/2023");

        d1[6] = new donor("Alia", 33, "Mumbai", "B+ve", "15/8/2023");
```

```
d1[7] = new donor("Sonu", 34, "Vellore", "A+ve", "8/4/2023");  
d1[8] = new donor("Champak", 39, "Nagpur", "O+ve", "20/1/2023");  
d1[9] = new donor("Rahul", 40, "Chennai", "B+ve", "3/3/2024");
```

```
try {  
    FileWriter writer = new FileWriter("donor.txt");  
    for (int i = 0; i < 10; i++) {  
        writer.write(d1[i].name + " " + d1[i].Age + " " + d1[i].Address + " " + d1[i].BloodGroup + " " + d1[i].last_donation_date + "\n");  
    }  
    writer.close();  
} catch (IOException e) {  
    System.out.println("An error occurred.");  
    e.printStackTrace();  
}
```

```
try {  
    File myObj = new File("donor.txt");  
    Scanner myReader = new Scanner(myObj);  
    while (myReader.hasNextLine()) {  
        String data = myReader.nextLine();  
        String[] arr = data.split(" ");  
        if (arr[3].equals("A+ve")) {  
            String[] date = arr[4].split("/");  
            int day = Integer.parseInt(date[0]);  
            int month = Integer.parseInt(date[1]);  
            int year = Integer.parseInt(date[2]);  
            if (year == 2023 && month < 7) {  
                System.out.println(data);  
            }  
        }  
    }  
    myReader.close();  
} catch (Exception e) {  
    System.out.println("An error occurred.");  
    e.printStackTrace();  
}
```

```
System.out.println("\nShifa Khan 21BBS0255");
```

```
}
```

```
}
```

OUTPUT:

```
PS C:\Users\AMAAN KHAN\Desktop> cd "c:\Users\AMAAN KHAN\Desktop"
Shagun 30 Patna A+ve 23/6/2023
Sonu 34 Vellore A+ve 8/4/2023

Shifa Khan 21BBS0255
PS C:\Users\AMAAN KHAN\Desktop>
```

SCREENSHOT:

```
assignment.java  donor.txt  X
C:\Users\AMAAN KHAN\Desktop> cd "c:\Users\AMAAN KHAN\Desktop"
1 Shifa 24 Gurgaon O+ve 16/12/2024
2 Deep 26 Thane AB+ve 24/6/2024
3 Parvi 27 Chandigarh B+ve 30/9/2024
4 Satvik 28 lahore O+ve 5/6/2023
5 Shagun 30 Patna A+ve 23/6/2023
6 Shivin 31 Bangalore AB+ve 3/2/2023
7 Alia 33 Mumbai B+ve 15/8/2023
8 Sonu 34 Vellore A+ve 8/4/2023
9 Champak 39 Nagpur O+ve 20/1/2023
10 Rahul 40 Chennai B+ve 3/3/2024
```

