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JAVA CASE STUDY

Problem Statement: Problem statement deals with the implementation of Single Level Inheritance, we are given two classes(Person,Donor) both the classes have private data members,the task to be done is to get the user input and then create a method displayDonationDetails which displays all the data we got from user, call the above method in the main class.

Person.java:

package practise;

```
public class Person {
    private String name;
    private String dateOfBirth;
    private String gender;
    private String mobileNumber;
    private String bloodGroup;

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getDateOfBirth() {
        return dateOfBirth;
    }

    public void setDateOfBirth(String dateOfBirth) {
        this.dateOfBirth = dateOfBirth;
    }
}
```

```

    public String getGender() {
        return gender;
    }

    public void setGender(String gender) {
        this.gender = gender;
    }

    public String getMobileNumber() {
        return mobileNumber;
    }

    public void setMobileNumber(String mobileNumber) {
        this.mobileNumber = mobileNumber;
    }

    public String getBloodGroup() {
        return bloodGroup;
    }

    public void setBloodGroup(String bloodGroup) {
        this.bloodGroup = bloodGroup;
    }

}

```

Donor.java

```
package practise;
```

```

public class Donor extends Person {
    private String bloodBankName;
    private String donorType;
    private String donationDate;

    public String getBloodBankName() {
        return bloodBankName;
    }
}

```

```
public void setBloodBankName(String bloodBankName) {  
    this.bloodBankName = bloodBankName;  
}
```

```
public String getDonorType() {  
    return donorType;  
}
```

```
public void setDonorType(String donorType) {  
    this.donorType = donorType;  
}
```

```
public String getDonationDate() {  
    return donationDate;  
}
```

```
public void setDonationDate(String donationDate) {  
    this.donationDate = donationDate;  
}
```

```
public void displayDonationDetails(String name,String dob,String gen,String  
num,String blood_group,String blood_bank_name,String Donor_Type,String Donation_Date  
) {
```

```
    Donor d = new Donor();
```

```
    d.setName(name);  
    d.setDateOfBirth(dob);  
    d.setGender(gen);  
    d.setMobileNumber(num);  
    d.setBloodGroup(blood_group);
```

```

        d.setBloodBankName(blood_bank_name);
        d.setDonorType(Donor_Type);
        d.setDonationDate(Donation_Date);

        System.out.println("Donation Details :");
        System.out.println("Name : "+ d.getName());
        System.out.println("Date Of Birth : "+ d.getDateOfBirth());
        System.out.println("Gender : "+ d.getGender());
        System.out.println("Mobile Number : "+ d.getMobileNumber());
        System.out.println("Blood Group : "+ d.getBloodGroup());
        System.out.println("Blood Bank Name : "+ d.getBloodBankName());
        System.out.println("Donor Type : "+ d.getDonorType());
        System.out.println("Donation Date : "+ d.getDonationDate());
    }
}

```

CaseStudy_MainClass.java

```

package practise;
import java.util.Scanner;
public class CaseStudy_MainClass {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the name :");
        String name = sc.nextLine();

        System.out.println("Enter Date of Birth :");
        String dob = sc.nextLine();

        System.out.println("Enter Gender :");
        String gen = sc.nextLine();

        System.out.println("Enter Mobile Number :");
        String num = sc.nextLine();

        System.out.println("Enter Blood Group :");
        String blood_group = sc.nextLine();
    }
}

```

```
System.out.println("Enter Blood Bank Name :");
```

```
String blood_bank_name = sc.nextLine();
```

```
System.out.println("Enter Donor Type :");
```

```
String Donor_Type = sc.nextLine();
```

```
System.out.println("Enter Donation Date");
```

```
String Donation_Date = sc.nextLine();
```

```
Donor d = new Donor();
```

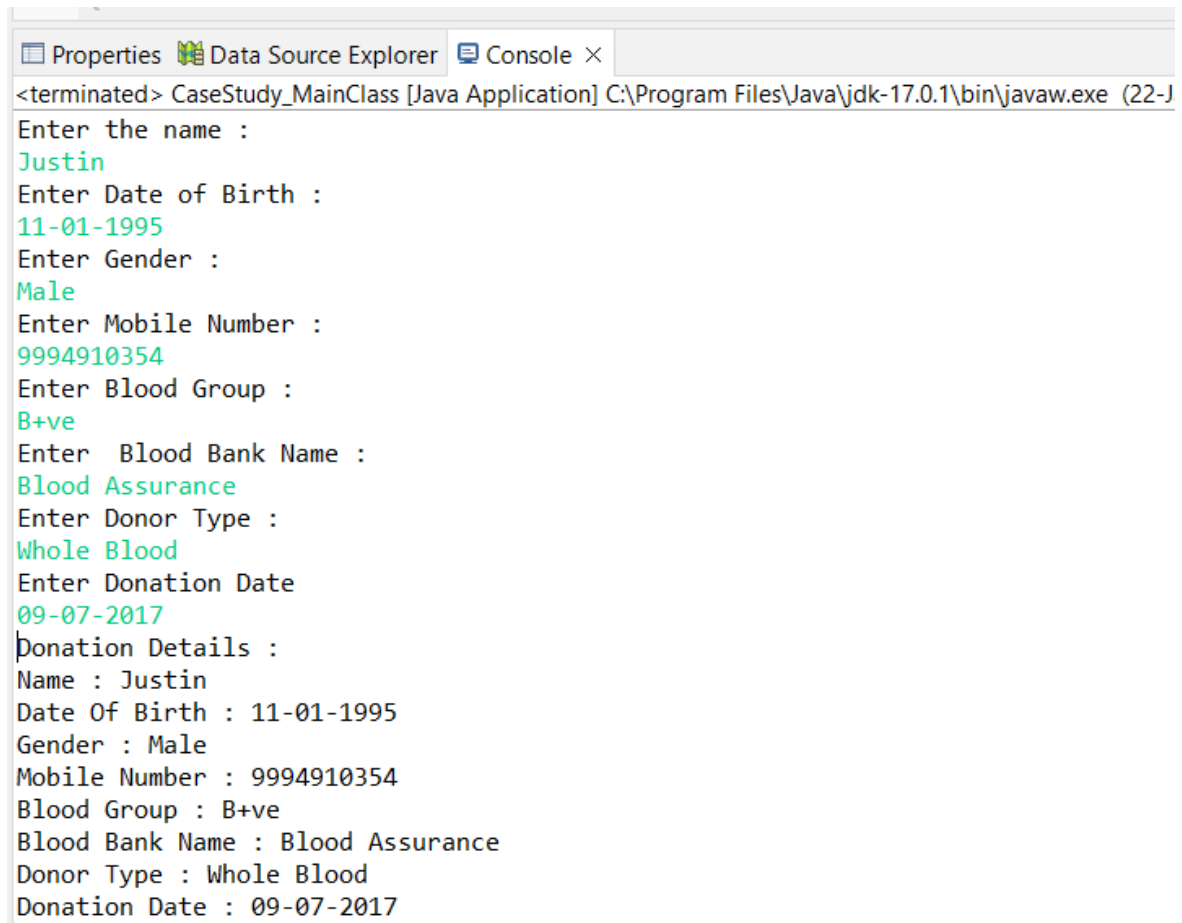
```
d.displayDonationDetails(name,dob,gen,num,blood_group,blood_bank_name,Donor_Type,Donation_Date);
```

```
}
```

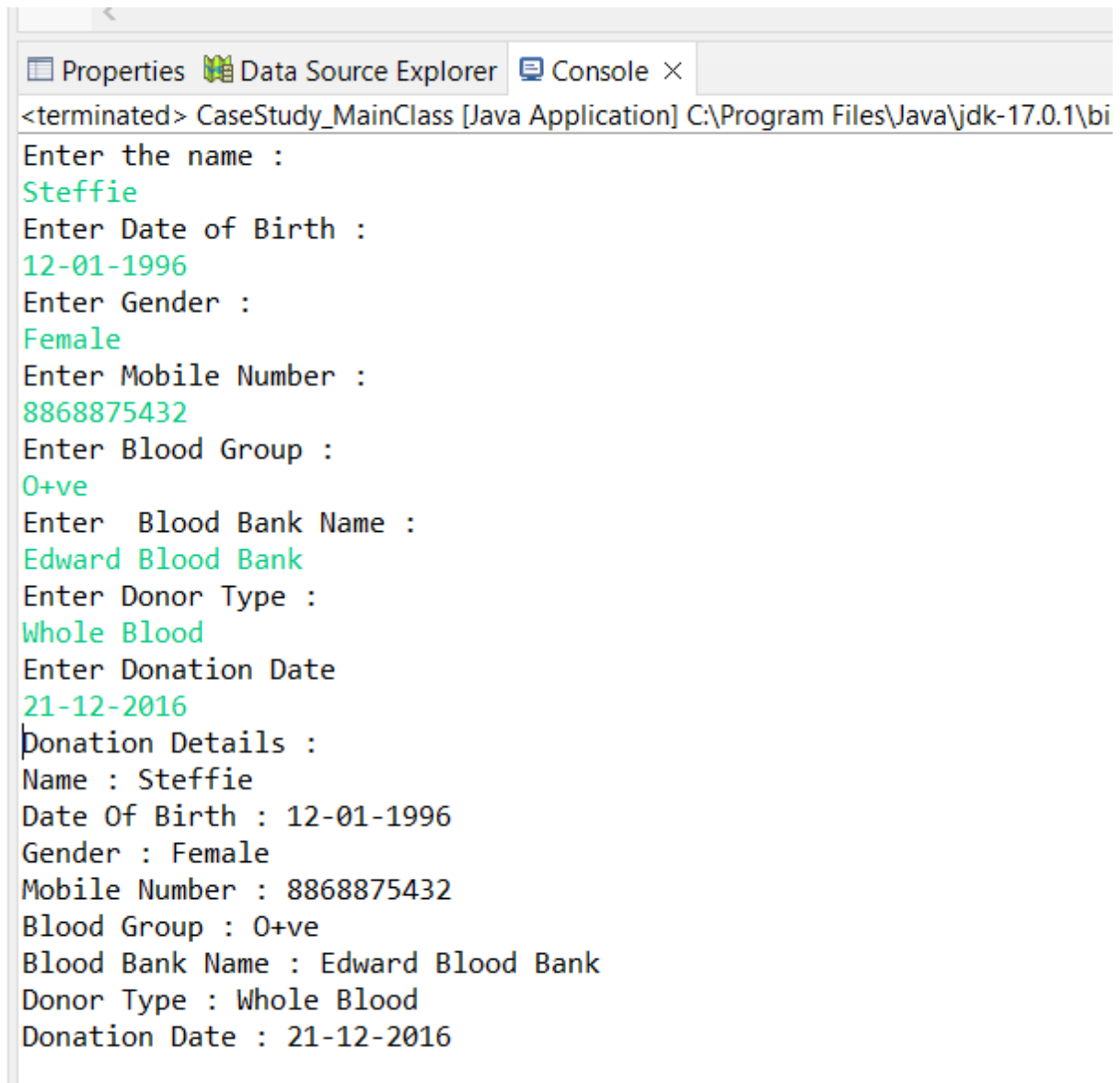
```
}
```

OUTPUT:

Figure1



```
<terminated> CaseStudy_MainClass [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe (22-J
Enter the name :
Justin
Enter Date of Birth :
11-01-1995
Enter Gender :
Male
Enter Mobile Number :
9994910354
Enter Blood Group :
B+ve
Enter Blood Bank Name :
Blood Assurance
Enter Donor Type :
Whole Blood
Enter Donation Date
09-07-2017
Donation Details :
Name : Justin
Date Of Birth : 11-01-1995
Gender : Male
Mobile Number : 9994910354
Blood Group : B+ve
Blood Bank Name : Blood Assurance
Donor Type : Whole Blood
Donation Date : 09-07-2017
```



```
<terminated> CaseStudy_MainClass [Java Application] C:\Program Files\Java\jdk-17.0.1\bi
Enter the name :
Steffie
Enter Date of Birth :
12-01-1996
Enter Gender :
Female
Enter Mobile Number :
8868875432
Enter Blood Group :
O+ve
Enter Blood Bank Name :
Edward Blood Bank
Enter Donor Type :
Whole Blood
Enter Donation Date
21-12-2016
Donation Details :
Name : Steffie
Date Of Birth : 12-01-1996
Gender : Female
Mobile Number : 8868875432
Blood Group : O+ve
Blood Bank Name : Edward Blood Bank
Donor Type : Whole Blood
Donation Date : 21-12-2016
```

Figure2: