EXPERIMENT 6

// Introduction to the concept of classes and objects.

/* **Class -** A class is a user-defined data type that contains the specifications of the **data members (attributes)** and the **member functions (methods)** of an object.

Object - An object is an instance of a class i.e., it is the basic run-time entity that works as per the specifications made for it in its class.

- The data members specified for an object can be accessed only by its member functions.
- However, different objects can communicate with each other by sending messages to each other using their functions.

➔ *A class is just a blueprint for an object. So it does not get stored in the memory. But an object is its run-time instance, so as soon as it is declared with a class, memory gets allocated for it as per the specifications (data members & member functions) made in the class. */*

PROGRAM 6

/* To define a class that represents the deposit procedure for a bank account, and implement this class with the help of its object.
This class would contain the following:
Data Members - depositor's name, type of account, account number, amount to be deposited & balance amount in account.
Member Functions - to get the details of the depositor and account; to deposit the amount in the account; & to display the receipt of the deposit. ***/***

// Source Code

```
import java.util.Scanner;

class Deposit
{
   String depName,depAccType;
   long depAccNo;
   float depAmt,avalBal;

   void getDepDetails(String a, String b, long c)
   {
      depName = a;
      depAccType = b;
      depAccNo = c;
```

```
    }

    void getDeposit(float d)
    {
        depAmt = d;
        avalBal += depAmt;
    }

    void showRecpt()
    {
        System.out.println("\nAccount Holder: " + depName);
        System.out.println("Account Type: " + depAccType);
        System.out.println("Amount Deposited: Rs. " + depAmt);
        System.out.println("Available Balance: Rs. " + avalBal);
    }
}
class MainClass
{
        public static void main(String[] args)
        {
            Scanner sc = new Scanner(System.in);

            Deposit dep1 = new Deposit();

            String name,accType;
            long accNo;
            float amount;
            int recpt;

            System.out.print("Enter Account Holder's Name: ");
            name = sc.nextLine();
            System.out.print("Enter Account Type: ");
            accType = sc.nextLine();
            System.out.print("Enter Account Number: ");
            accNo = sc.nextLong();
            System.out.print("Enter Deposit Amount: ");
            amount = sc.nextFloat();

            dep1.getDepDetails(name,accType,accNo);
            dep1.getDeposit(amount);

            System.out.print("Do you want a receipt? Enter 1 for yes and 0 for no: ");
            recpt = sc.nextInt();
```

```
            if(recpt == 1)
            {
               dep1.showRecpt();
            }
            else
            {
               System.out.println("Amount deposited successfully.");
            }
         }
}
```

Output

```
Enter Account Holder's Name: Khushboo Parashar
Enter Account Type: Savings
Enter Account Number: 11223344556677
Enter Deposit Amount: 10000
Do you want a receipt? Enter 1 for yes and 0 for no: 1

Account Holder: Khushboo Parashar
Account Type: Savings
Amount Deposited: Rs. 10000.0
Available Balance: Rs. 10000.0
```

VIVA QUESTIONS

1) **What is oop?**
2) **Actual procedure for object creation**
3) **New operator**
4) **Reference variables to objects**
5) **Parameters vs arguments**
6) **Formal and actual parameters**