

WEEK - 2

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1.Create a class Person with attributes like name, age, and methods to display these attributes.

Program:

```
class person
{
    String name;
    int age;
    public person(String name,int age){
        this.name=name;
        this.age=age;
    }
    public void display(){
        System.out.println("Name : "+name);
        System.out.println("Age : "+age);
    }
    public static void main(String[] args) {
        person p=new person1("Laya",22);
        p.display();
    }
}
```

Output:

Name : Laya
Age : 22

2. Implement a BankAccount class with methods for deposit, withdrawal, and displaying the account balance.

Program:

```
public class BankAccount {
    private double balance;
    public BankAccount(double initialBalance) {
        if (initialBalance < 0) {
            System.out.println("Initial balance cannot be negative");
        }
        this.balance = initialBalance;
    }
    public void deposit(double amount)
```

```

        {
        if (amount >= 0) {
            balance += amount;
            System.out.println("Deposited : "+amount);
        }else{
            System.out.println("Deposit amount must be positive.");
        }
    }
}

public void withdraw(double amount)
    {
        if (amount <= 0)
            {
                System.out.println("Withdrawal amount must be positive");
            }
        if (amount > balance)
            {
                System.out.println("Insufficient funds.");
            }
        balance -= amount;
        System.out.println("Withdraw amount: "+amount);
    }

public void displayBalance()
    {
        System.out.println("Current balance: "+balance);
    }

public static void main(String[] args)
    {
        BankAccount account = new BankAccount(10000.00);
        account.displayBalance();
        account.deposit(800.00);
        account.displayBalance();
        account.withdraw(900.00);
        account.displayBalance();
    }
}

```

Output:

```

Current balance: 10000.0
Deposited : 800.0
Current balance: 10800.0
Withdraw amount: 900.0
Current balance: 9900.0

```

3. Write a program that uses constructors to initialize objects and demonstrates method overloading.

Program:

```
public class Student {
    int id, passoutYear;
    String name, contactNumber, collegeName;

    Student(String contactNumber, String collegeName, int passoutYear){
        this.contactNumber = contactNumber;
        this.collegeName = collegeName;
        this.passoutYear = passoutYear;
    }
    Student(int id, String name){
        this("9876543210", "BVCITS", 2021);
        this.id = id;
        this.name = name;
    }
    public static void main(String[] args) {
        Student s = new Student(17, "Laya");
        System.out.println("Printing Student Information: \n");
        System.out.println("Name: "+s.name+"\nId: "+s.id+"\nContact No.: 
        "+s.contactNumber+"\nCollege Name: "+s.collegeName+"\nPassing Year: "+s.passoutYear);
    }
}
```

Output:

Printing Student Information:

Name: Laya

Id: 17

Contact No.: 9876543210

College Name: BVCITS

Passing Year: 2021