BANKING SYSTEM – CONTROL STRUCTURE

TASK 6: BANK TRANSACTION HISTORY DETAILS

- Uses an ArrayList to store transactions.

- A while loop keeps running until the user chooses to exit.

- User can deposit or withdraw money.

- Ensures that the withdrawal amount does not exceed the balance.

- Displays the transaction history upon exit.

JAVA PROGRAM:

```java
import java.util.*;
public class Task6 {
   public static void main(String[] args){
      Scanner sc=new Scanner(System.in);
      List<String> list=new ArrayList<>();
      double balance=0;
      while(true){
         System.out.println("Choose a transaction");
         System.out.println("1.Deposit");
         System.out.println("2.Withdraw");
         System.out.println("3.Exit");
         System.out.println("Enter your choice:");
         int choice=sc.nextInt();
         if(choice==1){
            System.out.println("Enter deposit amount:");
            double amt=sc.nextDouble();
            if(amt>0){
               balance+=amt;
               list.add("Deposit: "+amt);
               System.out.println("Deposit successful");
            }
            else{
               System.out.println("Invalid amount");
            }
         }
         else if(choice==2){
            System.out.println("Enter withdrawal amount:");
            double amt=sc.nextDouble();
            if(amt>0 && amt<=balance){
               balance-=amt;
               list.add("Withdraw: "+amt);
               System.out.println("Withdraw successful");
            }
```

```java
                else{
                    System.out.println("Invalid amount");
                }
            }
            else if(choice==3){
                System.out.println("\nTransaction History:");
                if(list.isEmpty()){
                    System.out.println("No transactions made");
                }
                else{
                    for(String t:list){
                        System.out.println(t);
                    }
                    System.out.println("Balance amount: "+balance);
                }
                break;
            }
            else{
                System.out.println("Invalid choice");
            }

        }

    }

}
```

OUTPUT:

```
Choose a transaction
1.Deposit
2.Withdraw
3.Exit
Enter your choice:
1
Enter deposit amount:
2000
Deposit successful
Choose a transaction
1.Deposit
2.Withdraw
3.Exit
Enter your choice:
2
Enter withdrawal amount:
1000
Withdraw successful
Choose a transaction
1.Deposit
2.Withdraw
3.Exit
Enter your choice:
3

Transaction History:
Deposit: 2000.0
Withdraw: 1000.0
Balance amount: 1000.0
```