Question 1 -
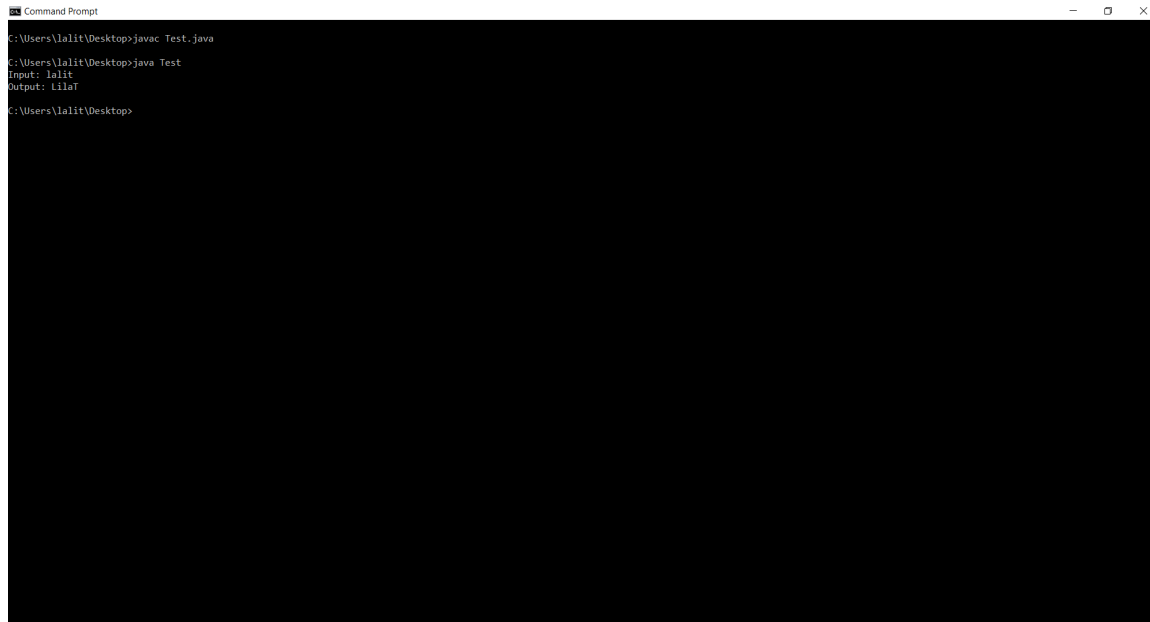
source code

```
class Test{
        public static void main(String[] argss){

                String input = "lalit";
                String output = "";
                char c1 = input.charAt(0);
                char c2 = input.charAt(input.length()-1);
                output = "" + String.valueOf(c1).toUpperCase();
                int length = input.length()-2;
                while(length>0){
                        output = output + String.valueOf(input.charAt(length));
                        length--;
                }
                output = output + String.valueOf(c2).toUpperCase();
                System.out.println("Input: " + input);
                System.out.println("Output: " + output);
        }
}
```

output -

Question 2 :

```java
import java.io.*;

import java.lang.*;

class LessBalanceException extends Exception

{

  LessBalanceException(double amt)

  {

  System.out.println("Withdrawing "+amt+" is invlaid");

  }

}

class Account

{

  static int count=0;

  int accno;
```

```java
    double bal;
    String name;
    Account(double bal,String n,int accno)
    {
      System.out.println("\nNew Account opened....!!");
      this.bal=bal;
      count++;
      System.out.println("Account Holder Name : " + n);
      name=n;
      System.out.println("Your Account Number is : "+accno);
      this.accno=accno;
      System.out.println("Total number of accounts : "+count);


    }
    void deposit(double amt)
    {
      System.out.println("Availabe Balance : "+bal);
      bal=bal+amt;
      System.out.println("Rs. : "+amt+" /- Created");
      System.out.println("Balance : "+bal);
    }
    void withdraw(double amt) throws LessBalanceException
    {
      System.out.println("\nAvailabe Balance : "+bal);
```

```java
      bal-=amt;

      if(bal<500)

      {

        bal+=amt;

        throw new LessBalanceException(amt);

      }

      System.out.println("Rs. : "+amt+ "/-Debited");

      System.out.println("Balacne : "+bal);

    }

    void balance()

    {

      System.out.println("\nCustomer information");

      System.out.println("=====================================");

      System.out.println("Customer Name : "+name);

      System.out.println("Account Number : "+accno);

      System.out.println("Balance : "+bal);

    }

}

class AccountDemo

{

  static int i=0;

  public static void main(String argv[]) throws IOException

  {

    Account ob[]=new Account[10];
```

```java
        BufferedReader br=new BufferedReader(new
InputStreamReader(System.in));

    double amt;

    String name;

    int ch,accno,k;

    boolean t=false;

    while(true)

    {

      System.out.println("\n*** Bank Transaction ***");

      System.out.println("1.Open new Account\n2.Deposit");

      System.out.println("3.Withdraw\n4.Balance\n5.Exit");

      System.out.print("Enter your choice : ");

      ch=Integer.parseInt(br.readLine());

      switch(ch)

      {

      case 1:

      System.out.println("Opening New Account : ");

      System.out.print("Enter your name : ");

      name=br.readLine();

      System.out.print("\nEnter Account Number : ");

      accno=Integer.parseInt(br.readLine());

      System.out.print("\nEnter initial amount(to be >=500) : ");

      amt=Double.parseDouble(br.readLine());

      if(amt<500)

      System.out.println("You cannot create an account with less than Rs.500/-");
```

```java
else
{
  ob[i]=new Account(amt,name,accno);
  i++;
}
break;

case 2:
System.out.print("\nEnter Account number : ");
accno=Integer.parseInt(br.readLine());
for(k=0;k<i;k++)
if(accno==ob[k].accno)
{
  t=true;
  break;
}

if(t)
{
  System.out.print("\nEnter the Amount for Deposit : ");
  amt=Double.parseDouble(br.readLine());
  ob[k].deposit(amt);
}
else
```

```java
System.out.println("Invalid Account Number...!!!");

t=false;

break;


case 3:

System.out.print("\nEnter Account number : ");

accno=Integer.parseInt(br.readLine());

for(k=0;k<i;k++)

if(accno==ob[k].accno)

{

  t=true;

  break;

}


if(t)

{

  System.out.print("\nEnter the Amount for Withdraw : ");

  amt=Double.parseDouble(br.readLine());

  try

  {

    ob[k].withdraw(amt);

  }

  catch(LessBalanceException e)

  {}
```

```java
}
else
System.out.println("Invalid Account Number...!!!");
t=false;
break;

case 4:
System.out.print("\nEnter Account number : ");
accno=Integer.parseInt(br.readLine());
for(k=0;k<i;k++)
if(accno==ob[k].accno)
{
  t=true;
  break;
}

if(t)
{
  //System.out.println(accno +" asdfsdf " +ob[k].accno);
  ob[k].balance();
}
else
System.out.println("Invalid Account Number...!!!");
t=false;
```

```
                    break;


                    case 5:

                    System.exit(1);

                    default: System.out.println("Invalid Choice !!!");

                }

            }

        }

    }
```

output :