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Class - MCA(2)
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1. Write a Java Program which, prints the elements of a string in such a way that the first and last element of the string are printed in Upper case and the
        intermediate elements are printed in reverse order.(do not use inbuilt function for reverse)
CODE:-

```java
import java.util.Scanner;
public class ReverseStr
{

        public static void main(String[] args)
        {

         String str1 = "Nadeem Ansari";
         String d= "";

         for (int i = str1.length() - 1; i >= 0; --i) {
          d += str1.charAt(i);
         }


         char[] str=d.toCharArray();
         for(int i=0;i<d.length();i++)
           {
         if(i==0 || str[i-1]==' ')
           {
            str[i]=Character.toUpperCase(str[i]);
           }
          else if(str[i]==' ' || str[i]=='\0')
             str[i-1]=Character.toUpperCase(str[i-1]);
           }
         System.out.print("After Converting String is: ");
         for(int i=0;i<d.length();i++)
         System.out.print(str[i]);
               }
        }
```
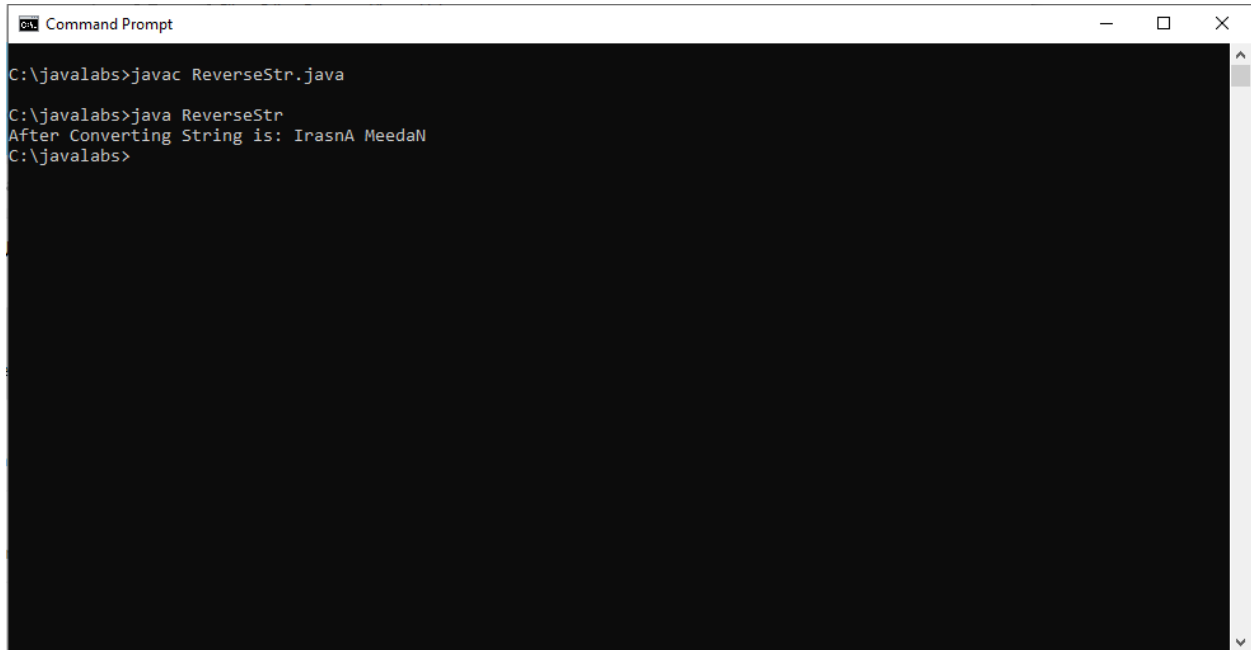
OUTPUT:-

```
Command Prompt                                                    —   □   ×

C:\javalabs>javac ReverseStr.java

C:\javalabs>java ReverseStr
After Converting String is: IrasnA MeedaN
C:\javalabs>
```

2. **Write a Java Program that has a Class Which Creates Account, perform Deposite Money and Tries to WithDraw more Money Which Generates a LessBalanceException.**
   Create BankAccount with 500 Rs Minimum Balance, Deposit Amount, Withdraw Amount and Also Throws LessBalanceException.
   Class LessBalanceException returns the Statement that Says WithDraw Amount(_Rs) is Not Valid.

CODE:-
```java
import java.io.*;
import java.lang.*;
class LessBalanceException extends Exception
{
 LessBalanceException(double amt)
 {
 System.out.println("Withdrawing "+amt+" is Not vlaid");
 }
}
class Account
{
 static int count=0;
 int accno;
 double bal;
 String name;
```

```java
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);
 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("\n***Customer 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
```

```java
{
 Account ob[]=new Account[10];
 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/-");
  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)
```

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

```java
        }

    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:-

```
Balacne : 700.0

** Bank Transaction **
1.Open new Account
2.Deposit
3.Withdraw
4.Balance
5.Exit
Enter your choice : 4

Enter Account number : 4495

***Customer information**
=========================================
Customer Name : Nadeem Ansari
Account Number : 4495
Balance : 700.0

** Bank Transaction **
1.Open new Account
2.Deposit
3.Withdraw
4.Balance
5.Exit
Enter your choice : 5

C:\javalabs>
```