Name:- Himanshu Chandola

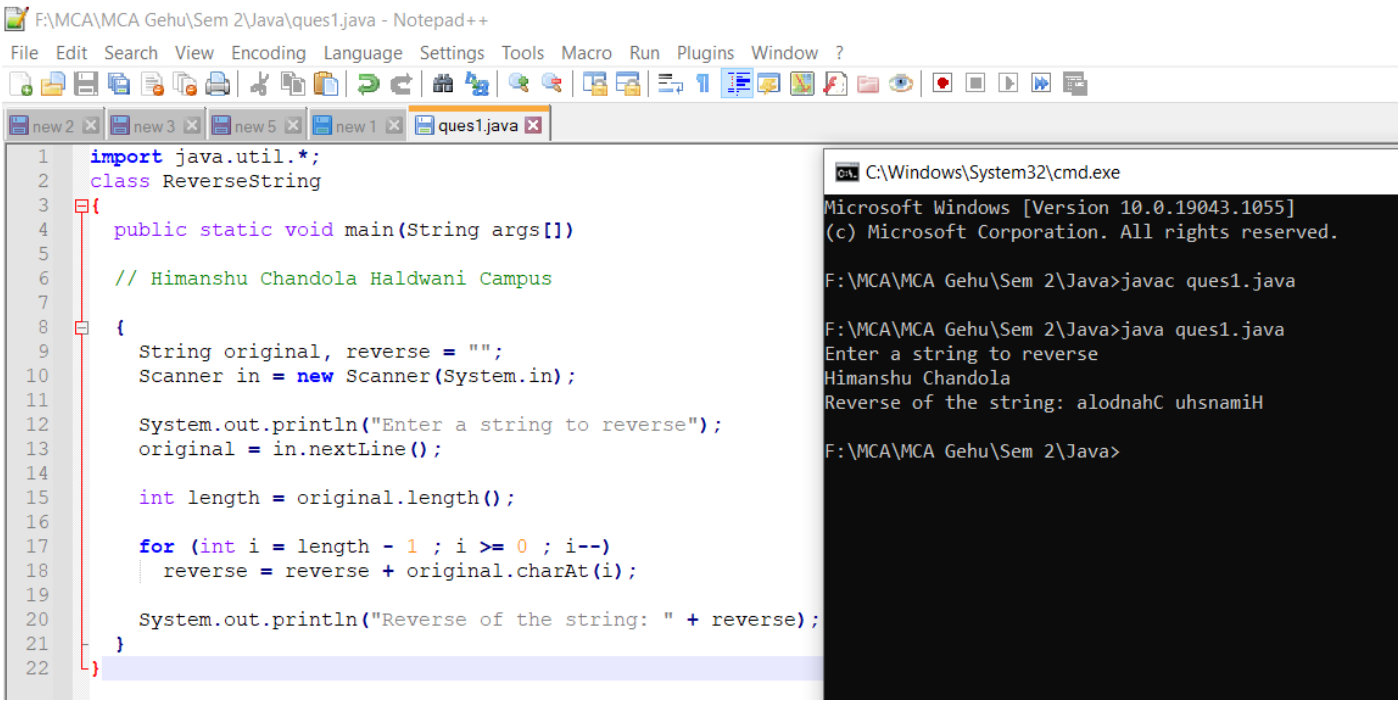
Student ID:- 20711136

University Roll Number:- 2098005

Ques 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).

Answer:-

```
import java.util.*;
class ReverseString
{
  public static void main(String args[])

  // Himanshu Chandola Haldwani Campus

  {
    String original, reverse = "";
    Scanner in = new Scanner(System.in);

    System.out.println("Enter a string to reverse");
    original = in.nextLine();

    int length = original.length();

    for (int i = length - 1 ; i >= 0 ; i--)
      reverse = reverse + original.charAt(i);

    System.out.println("Reverse of the string: " + reverse);
  }
}
```



Ques 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.

Ans.

```
import java.io.*;
import java.lang.*;
class LessBalanceException extends Exception
{
 LessBalanceException(double amt)
 {
 System.out.println("Withdrawing "+amt+" is invlaid");
 }
}
class AccountDemo
{
 static int count=0;
 int accno;
 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;
```

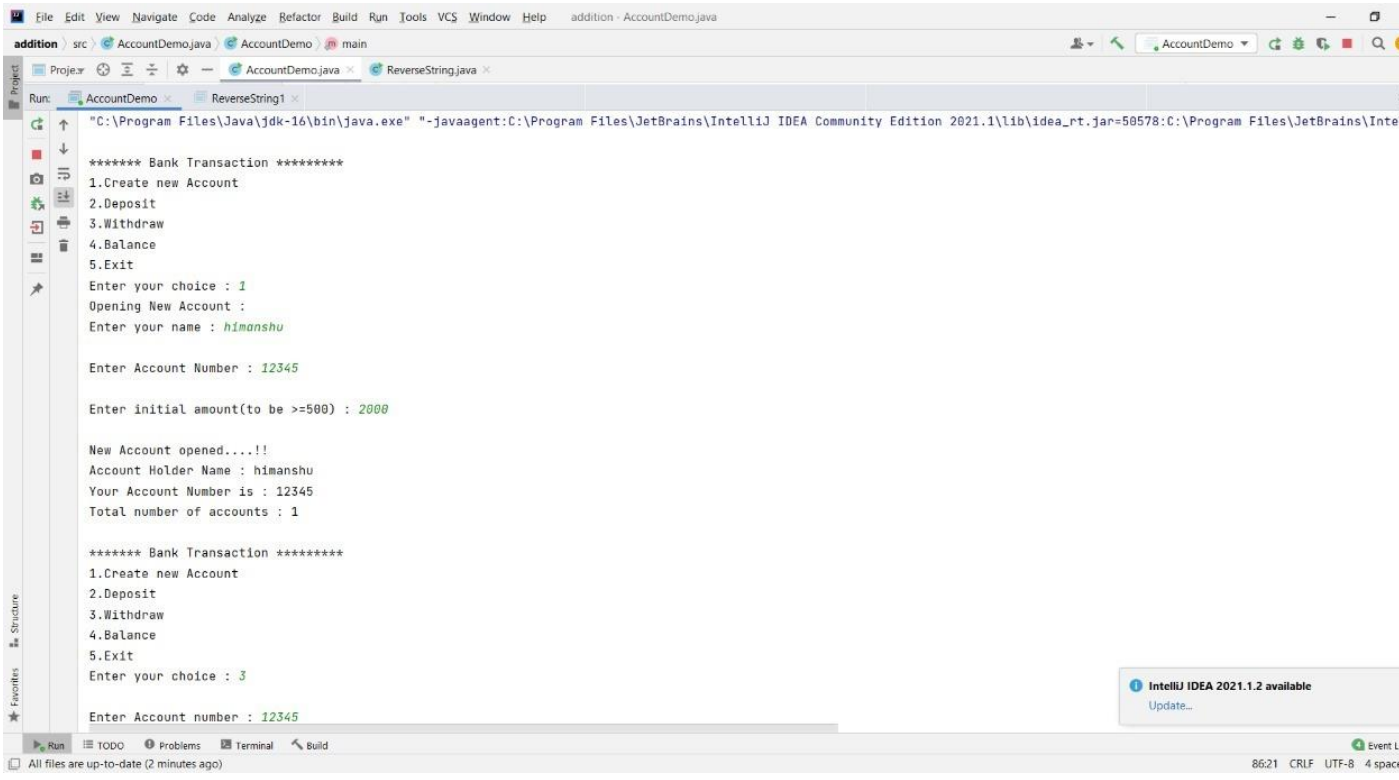
```
 System.out.println("Rs. : "+amt+" /- Created");
 System.out.println("Balance : "+bal);
}
void withdraw(double amt) throws LessBalanceException
{
 System.out.println("\nAvailabe Balance : "+bal);
 bal-=amt;
 if(bal<500)
 {
  bal+=amt;
  throw new LessBalanceException(amt);
 }
 System.out.println("Rs. : "+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
 {
  Account ob[]=new Account[10];
  BufferedReader br=new BufferedReader(new InputStreamReader(System.in));
```

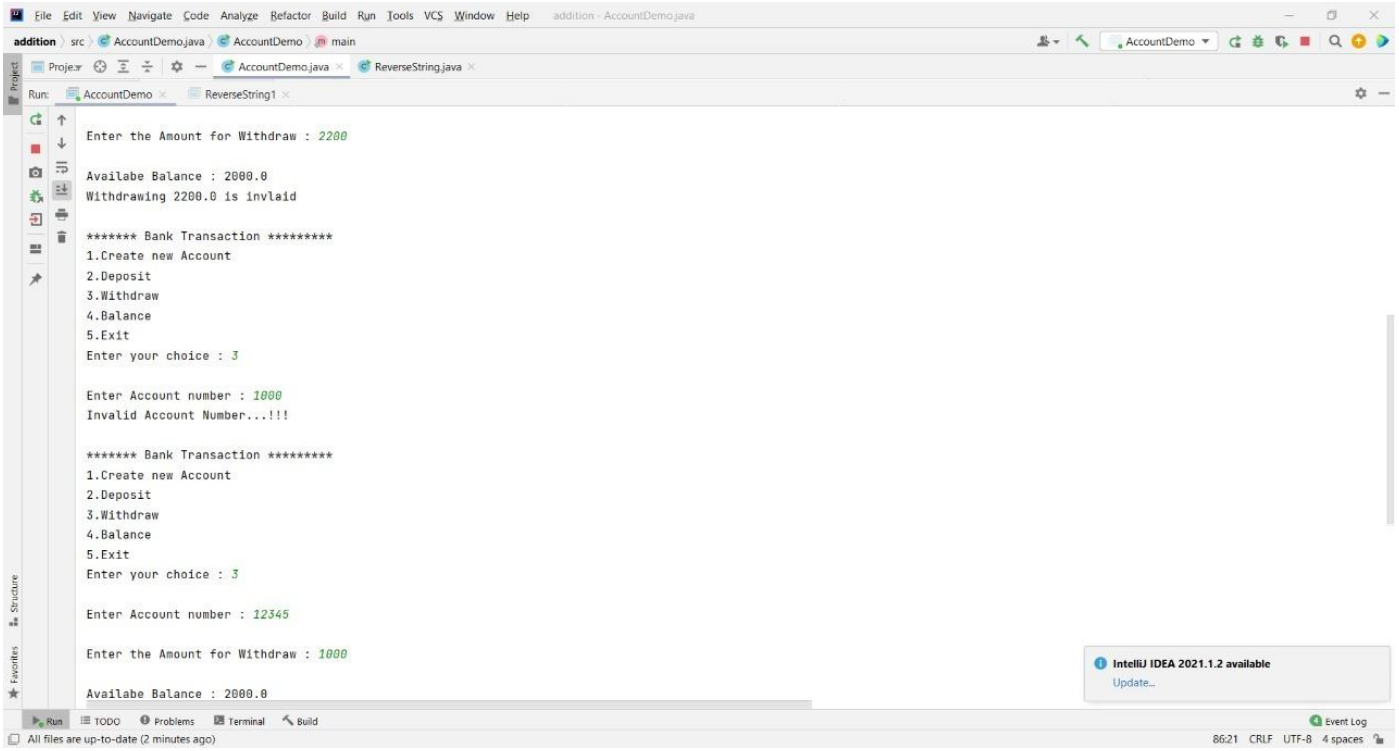
```
double amt;
String name;
int ch,accno,k;
boolean t=false;
while(true)
{
 System.out.println("\n******* Bank Transaction *********");
 System.out.println("1.Open new Account\n2.Deposit");
 System.out.println("3.Withdraw\n4.Balance\n5.Exit");
 System.out.print("Enter your choice : ");
 ch=Integer.parseInt(br.readLine());
 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:
```

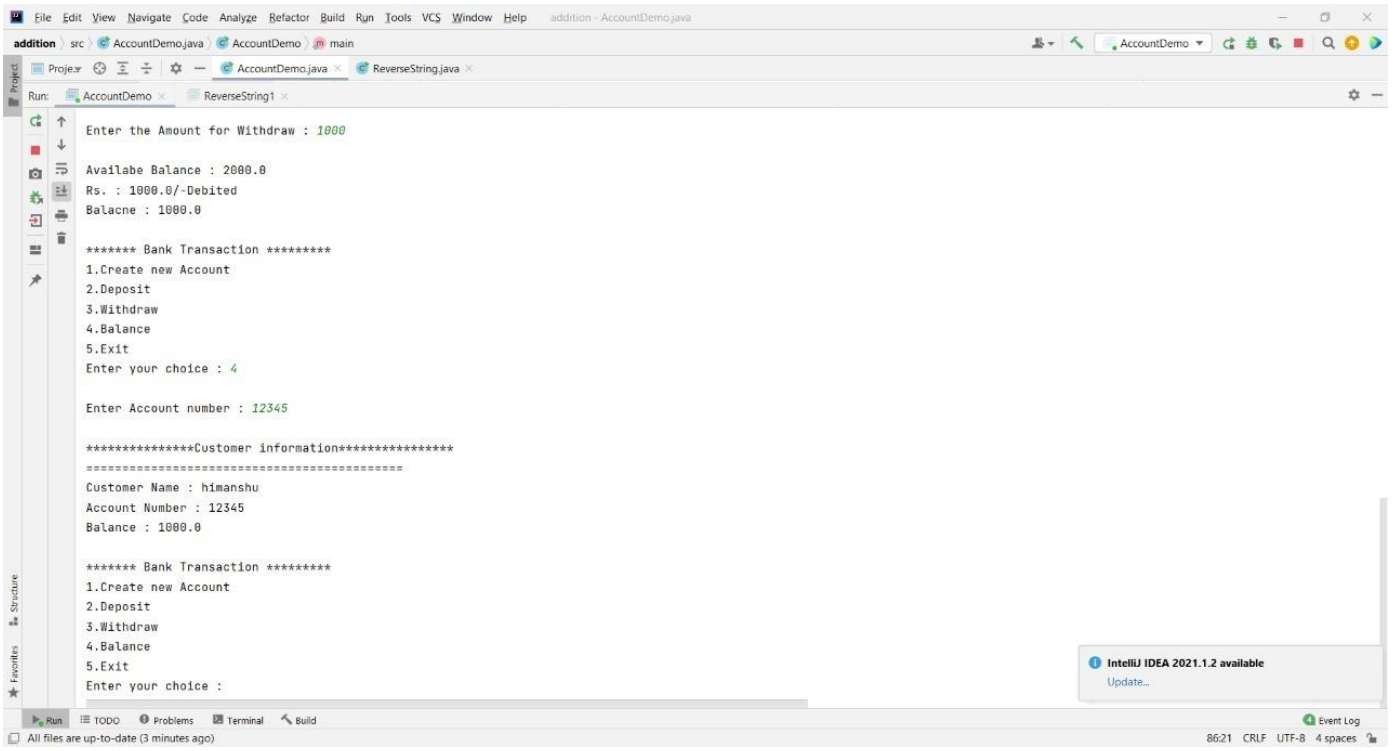
```
System.out.print("\nEnter Account number : ");
accno=Integer.parseInt(br.readLine());
for(k=0;k<i;k++)
if(accno==ob[k].accno)
{
 t=true;
 break;
}

if(t)
{
 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;
}

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 !!!");
  }
 }
}
}
```







Submitted by Himanshu Chandola , HLD Campus