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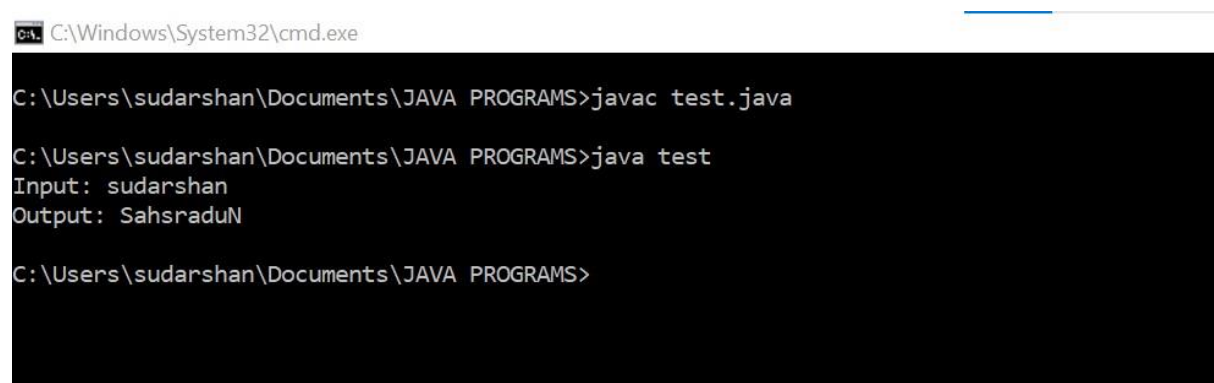
1. Write a Java Program which, prints the elements of a string in such a way that the first and last element of the string are printed in Upper case and the intermediate elements are printed in reverse order.(do not use inbuilt function for reverse)

code: Code:

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

        String input = "sudarshan";
        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);
    }
}
```

Screenshot:



```
C:\Windows\System32\cmd.exe

C:\Users\sudarshan\Documents\JAVA PROGRAMS>javac test.java

C:\Users\sudarshan\Documents\JAVA PROGRAMS>java test
Input: sudarshan
Output: SahsraduN

C:\Users\sudarshan\Documents\JAVA PROGRAMS>
```

2. Write a Java Program that has a Class Which Creates Account, perform Deposit 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:

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

Screenshot:

C:\Windows\System32\cmd.exe

C:\Users\sudarshan\Documents\JAVA PROGRAMS>javac AccountDemo.java

C:\Users\sudarshan\Documents\JAVA PROGRAMS>java AccountDemo

\*\*\*\*\* Bank Transaction \*\*\*\*\*

- 1.Open new Account
- 2.Deposit
- 3.Withdraw
- 4.Balance
- 5.Exit

Enter your choice : 1

Opening New Account :

Enter your name : Sudarshan Tomar

Enter Account Number : 56789543

Enter initial amount(to be >=500) : 5000

New Account opened....!!

Account Holder Name : Sudarshan Tomar

Your Account Number is : 56789543

Total number of accounts : 1

\*\*\*\*\* Bank Transaction \*\*\*\*\*

- 1.Open new Account
- 2.Deposit
- 3.Withdraw
- 4.Balance
- 5.Exit

Enter your choice : 4

Enter Account number : 56789543

\*\*\*\*\*Customer information\*\*\*\*\*

Customer Name : Sudarshan Tomar

Account Number : 56789543

Balance : 5000.0

\*\*\*\*\* Bank Transaction \*\*\*\*\*

- 1.Open new Account
- 2.Deposit

2.Deposit

3.Withdraw

4.Balance

5.Exit

Enter your choice : 3

Enter Account number : 56789543

Enter the Amount for Withdraw : 500

Availabe Balance : 5000.0

Rs. : 500.0/-Debited

Balacne : 4500.0

\*\*\*\*\* Bank Transaction \*\*\*\*\*

1.Open new Account

2.Deposit

3.Withdraw

4.Balance

5.Exit

Enter your choice : 5

C:\Users\sudarshan\Documents\JAVA PROGRAMS>