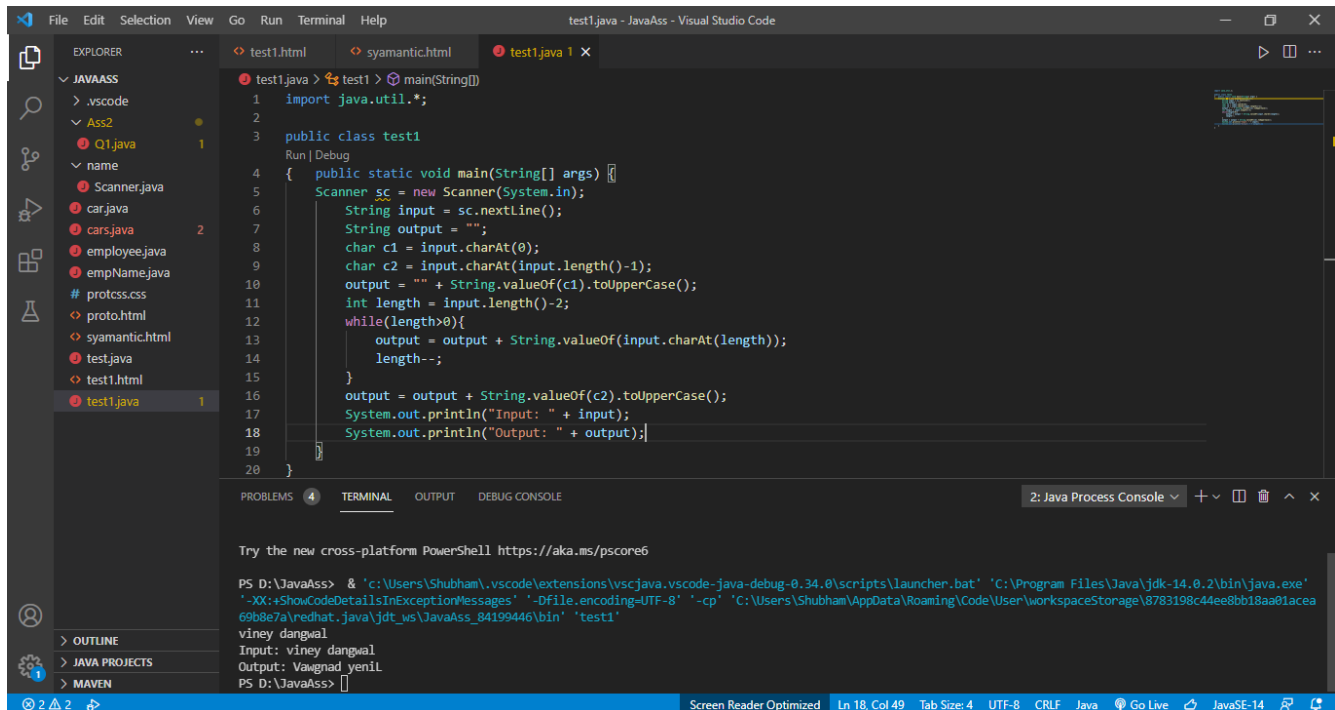


1. Write a Java Program which, prints the elements of a string in such a way that the first and last element of the string are printed in Upper case and the intermediate elements are printed in reverse order.(do not use inbuilt function for reverse)



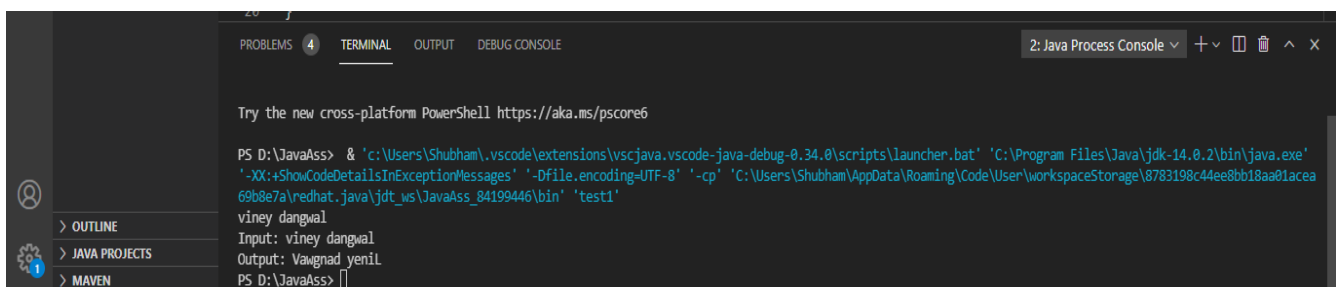
The screenshot shows the Visual Studio Code interface with a Java file named `test1.java` open. The code defines a `test1` class with a `main` method that takes a string input and prints its first and last characters in uppercase, followed by the remaining characters in reverse order. The terminal output shows the program being executed with the input `viney dangwal`, resulting in the output `Vavgnad yenil`.

```
test1.java - JavaAss - Visual Studio Code
test1.html  syamantic.html  test1.java 1 X
test1.java > test1 > main(String[])
1  import java.util.*;
2
3  public class test1
4  {
5      public static void main(String[] args) {
6          Scanner sc = new Scanner(System.in);
7          String input = sc.nextLine();
8          String output = "";
9          char c1 = input.charAt(0);
10         char c2 = input.charAt(input.length()-1);
11         output = "" + String.valueOf(c1).toUpperCase();
12         int length = input.length()-2;
13         while(length>0){
14             output = output + String.valueOf(input.charAt(length));
15             length--;
16         }
17         output = output + String.valueOf(c2).toUpperCase();
18         System.out.println("Input: " + input);
19         System.out.println("Output: " + output);
20     }
21 }
```

PROBLEMS 4 TERMINAL OUTPUT DEBUG CONSOLE 2: Java Process Console

Try the new cross-platform PowerShell <https://aka.ms/pscore6>

```
PS D:\JavaAss> & 'c:\Users\Shubham\.vscode\extensions\vscjava.vscode-java-debug-0.34.0\scripts\launcher.bat' 'C:\Program Files\Java\jdk-14.0.2\bin\java.exe'
'-XX:+ShowCodeDetailsInExceptionMessages' '-Dfile.encoding=UTF-8' '-cp' 'C:\Users\Shubham\AppData\Roaming\Code\User\workspaceStorage\8783198c44ee8bb18aa01acea
69b8e7a\redhat.java\jdt_ws\JavaAss_84199446\bin' 'test1'
viney dangwal
Input: viney dangwal
Output: Vavgnad yenil
PS D:\JavaAss>
```



This screenshot shows the same terminal window as the previous one, but with a slightly different command used to run the program. The output remains the same: `Vavgnad yenil`.

```
PROBLEMS 4 TERMINAL OUTPUT DEBUG CONSOLE 2: Java Process Console
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS D:\JavaAss> & 'c:\Users\Shubham\.vscode\extensions\vscjava.vscode-java-debug-0.34.0\scripts\launcher.bat' 'C:\Program Files\Java\jdk-14.0.2\bin\java.exe'
'-XX:+ShowCodeDetailsInExceptionMessages' '-Dfile.encoding=UTF-8' '-cp' 'C:\Users\Shubham\AppData\Roaming\Code\User\workspaceStorage\8783198c44ee8bb18aa01acea
69b8e7a\redhat.java\jdt_ws\JavaAss_84199446\bin' 'test1'
viney dangwal
Input: viney dangwal
Output: Vavgnad yenil
PS D:\JavaAss>
```

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.

```
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("\n Congratulation 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("\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];
        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(min amnt =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)
{

    ob[k].balance();
}
else
System.out.println("Invalid Account Number");
t=false;
break;

case 5:
System.exit(1);
default: System.out.println("Invalid Choice");
}
}
}
}

```

C:\Windows\System32\cmd.exe - java AccountDemo

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 : Viney Dangwal

Enter Account Number : 56758758

Enter initial amount(to be >=500) : 10000

New Account opened....!!

Account Holder Name : Viney Dangwal

Your Account Number is : 56758758

Total number of accounts : 1

***** Bank Transaction *****

1.Open new Account

2.Deposit

3.Withdraw

4.Balance

5.Exit

Enter your choice :