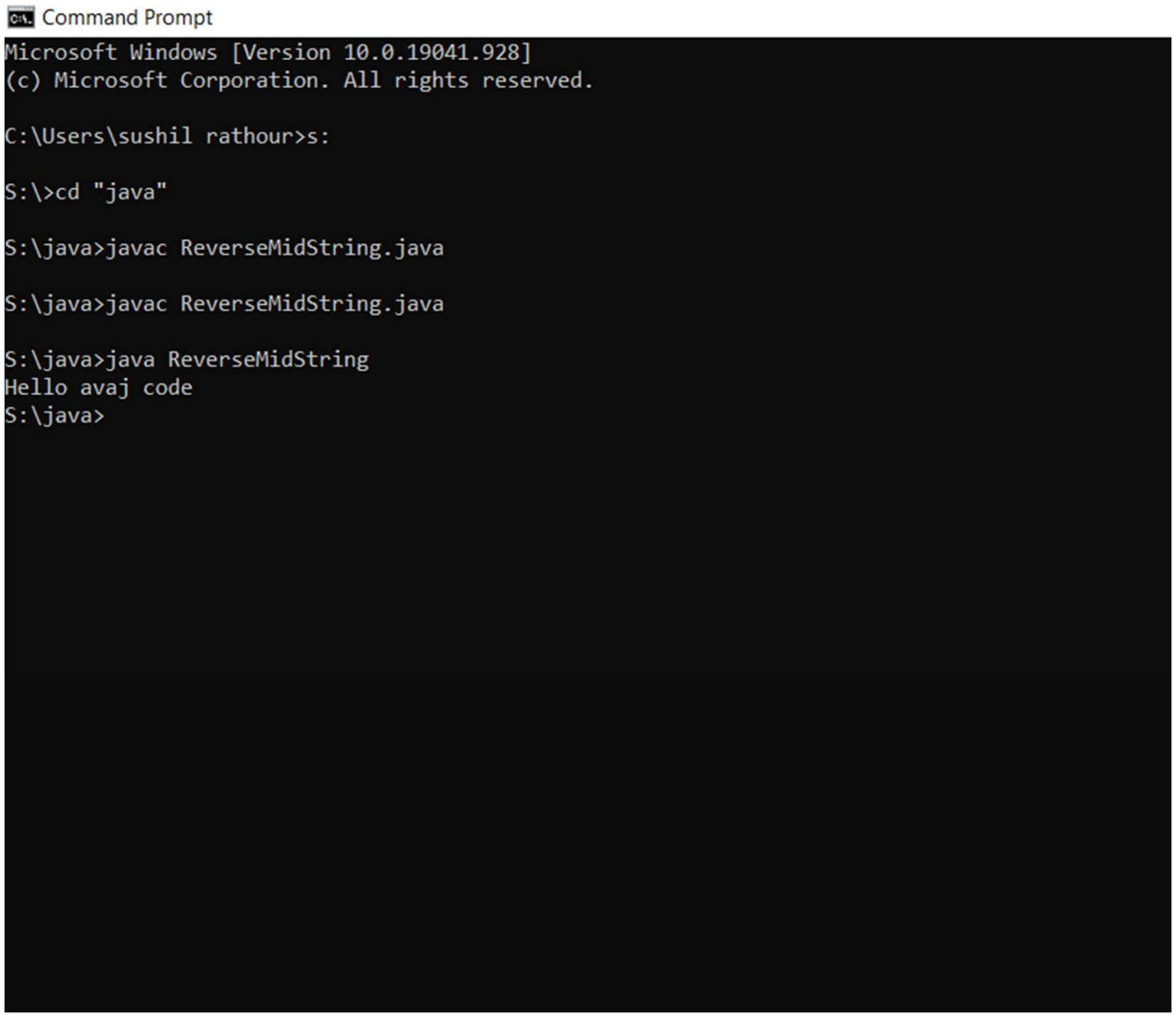
Java Programming

PMC 202

Q1. 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.

ReverseMidString.java

```java


public class ReverseMidString{

static void printReverse(String str)
    {
        int i = 0;
        for (i = 0; i < str.length() && str.charAt(i) != ' '; i++)
            System.out.print(str.charAt(i)) ;

        String word = "";


        for (; i < str.length(); i++) {

            if (str.charAt(i) != ' ')
                word += str.charAt(i);

            else {
                    System.out.print(new StringBuilder(word).
                                reverse().toString() + " ");
                    word = "";
            }
        }

        System.out.print(word + " ");
    }

    public static void main(String []args)
    {
        String str = "Hello java code";
        printReverse(str);
    }


}

```


Command Prompt
Microsoft Windows [Version 10.0.19041.928]
(c) Microsoft Corporation. All rights reserved.
C:\Users\sushil rathour>s:
S:\>cd "java"
S:\java>javac ReverseMidString.java
S:\java>javac ReverseMidString.java
S:\java>java ReverseMidString
Hello avaj code
S:\java>

Q2.

```
S:\java>
S:\java>
S:\java>javac AccountDemo.java

S:\java>java AccountDemo

*** Bank Transaction ***
1.Create new Account
2.Deposit
3.Withdraw
4.Balance
5.Exit
Enter your choice : 1
Opening New Account :
Enter your name : sushil

Enter Account Number : 115

Enter initial amount(to be >=500) : 1000

New Account opened....!!
Account Holder Name : sushil
Your Account Number is : 115
Total number of accounts : 1

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

Enter Account number : 115

Enter the Amount for Deposit : 500
Availabe Balance : 1000.0
Rs. : 500.0 /- Created
Balance : 1500.0
```

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

Enter Account number : 115

Enter the Amount for Withdraw : 2000

Availabe Balance : 1500.0
Withdrawing 2000.0 is invlaid

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

Enter Account number : 115

Enter the Amount for Withdraw : 600

Availabe Balance : 1500.0
Rs. : 600.0/-Debited
Balacne : 900.0

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

Enter Account number : 115

******Customer information*****
==========================================
Customer Name : sushil
Account Number : 115
Balance : 900.0
```

ReverseMidString.java | AccountDemo.java

```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;
    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;
```

ReverseMidString.java | AccountDemo.java

```
37          System.out.println("\nAvailabe Balance : "+bal);
38          bal-=amt;
39          if(bal<500)
40          {
41              bal+=amt;
42              throw new LessBalanceException(amt);
43          }
44          System.out.println("Rs. : "+amt+ "/-Debited");
45          System.out.println("Balacne : "+bal);
46      }
47      void balance()
48      {
49          System.out.println("\n******Customer information*****");
50          System.out.println("==========================================");
51          System.out.println("Customer Name : "+name);
52          System.out.println("Account Number : "+accno);
53          System.out.println("Balance : "+bal);
54      }
55  }
56  class AccountDemo
57  {
58      static int i=0;
59      public static void main(String argv[]) throws IOException
60      {
61          Account ob[]=new Account[10];
62          BufferedReader br=new BufferedReader(new InputStreamReader(System.in));
63          double amt;
64          String name;
65          int ch,accno,k;
66          boolean t=false;
67          while(true)
68          {
69              System.out.println("\n*** Bank Transaction ***");
70              System.out.println("1.Create new Account\n2.Deposit");
71              System.out.println("3.Withdraw\n4.Balance\n5.Exit");
72              System.out.print("Enter your choice : ");
73              ch=Integer.parseInt(br.readLine());
74              switch(ch)
```

ReverseMidString.java | AccountDemo.java

```
76              case 1:
77                  System.out.println("Opening New Account : ");
78                  System.out.print("Enter your name : ");
79                  name=br.readLine();
80                  System.out.print("\nEnter Account Number : ");
81                  accno=Integer.parseInt(br.readLine());
82                  System.out.print("\nEnter initial amount(to be >=500) : ");
83                  amt=Double.parseDouble(br.readLine());
84                  if(amt<500)
85                      System.out.println("You cannot create an account with less than Rs.500/-");
86                  else
87                  {
88                      ob[i]=new Account(amt,name,accno);
89                      i++;
90                  }
91                  break;
92
93              case 2:
94                  System.out.print("\nEnter Account number : ");
95                  accno=Integer.parseInt(br.readLine());
96                  for(k=0;k<i;k++)
97                      if(accno==ob[k].accno)
98                      {
99                          t=true;
100                         break;
101                     }
102
103                 if(t)
104                 {
105                     System.out.print("\nEnter the Amount for Deposit : ");
106                     amt=Double.parseDouble(br.readLine());
107                     ob[k].deposit(amt);
108                 }
109                 else
110                     System.out.println("Invalid Account Number...!!!");
111                 t=false;
112                 break;
113
```

```
                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;
                        }
```

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