

Q.1:

```
package MyPack;

import java.util.Scanner;

public class rev {

    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter the string");
        String str=sc.nextLine();
        System.out.println("reverse of string");
        String str2=str.substring(0,1);
        str2=str2.toUpperCase();

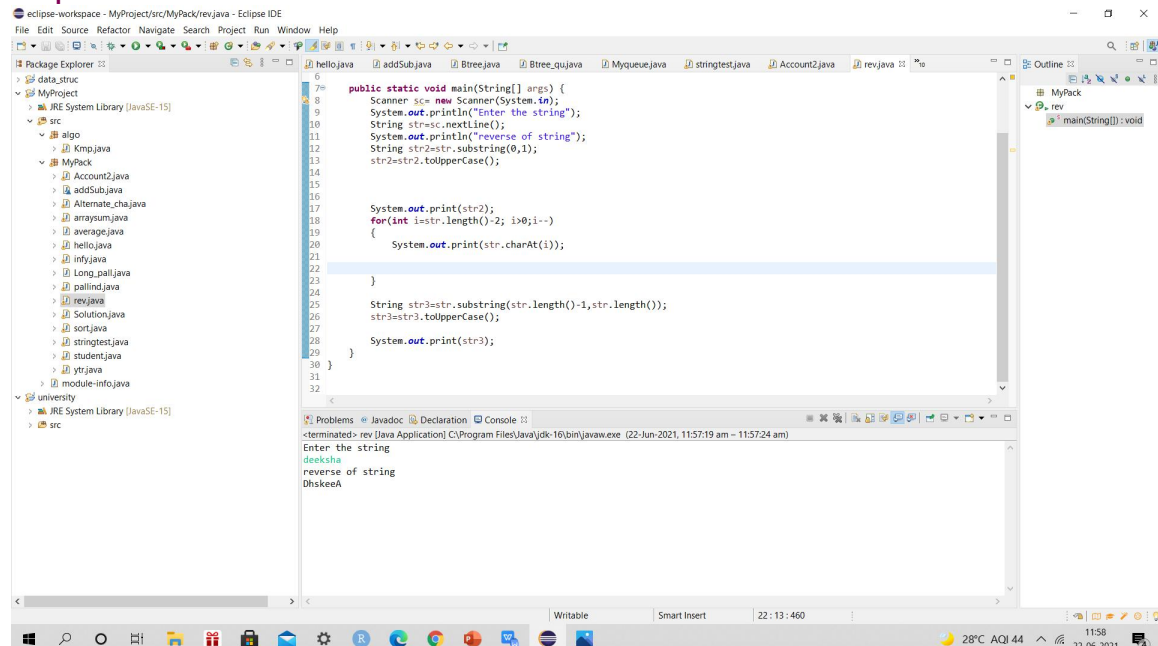
        System.out.print(str2);
        for(int i=str.length()-2; i>0;i--)
        {
            System.out.print(str.charAt(i));

        }

        String str3=str.substring(str.length()-1,str.length());
        str3=str3.toUpperCase();

        System.out.print(str3);
    }
}
```

Output:



Q.2:

```
package MyPack;

class LessBalanceException extends Exception
{
    LessBalanceException(String s){
        super(s);
    }
}

class BankAccount2
{
    private String accountNum; // the account number
    private double balance;    // the amount on deposit

    /**
     * Constructs a bank account with an account number and initial balance
     *
     * @param acctNum the account number
     * @param initialBalance the initial balance
     */
    public BankAccount2(String acctNum, double initialBalance)
    {
        accountNum = acctNum;
        balance = initialBalance;
    }

    /**
     * Deposits money into the bank account.
     *
     * @param amount the amount to deposit
     */
    public void deposit(double amount) // note "mutator" method
    {
        double newBalance = balance + amount;
        balance = newBalance;           // modifies instance var
    }

    /**
     * Withdraws money from the bank account.
     *
     * @param amount the amount to withdraw
     */
    public void withdraw(double amount) throws LessBalanceException // note
    "mutator" method
    {
        if(amount > balance)
    }
```

```

    {
        throw new LessBalanceException("Withdrawing amount "+amount+" is Not
valid");
    }else {
        double newBalance = balance - amount;
        balance = newBalance;
    }
}

/**
 * Gets the account number
 *
 * @return the account number
 */
public String getAccount() // note "accessor" method
{
    return accountNum;    // returns value of instance var
}

/**
 * Gets the current balance
 *
 * @return the balance
 */
public double getBalance() // note "accessor" method
{
    return balance;        // returns value of instance var
}
}
//***** end of BankAccount class definition *****

/**
 * A class to test the BankAccount2 class
 */
public class Account2
{

    public static void main(String[] args) throws LessBalanceException
    {
        // create two BankAccount objects
        BankAccount2 first = new BankAccount2("123456678", 500);

        // print initial balances
        System.out.printf("Account %s has initial balance of Rs.-%.2f%n",
            first.getAccount(), first.getBalance());

        try{
            first.withdraw(1000);
        }catch(Exception m){System.out.println("Exception occured: "+m);}
        System.out.println("deposited 2000 amount");
        first.deposit(2000);
    }
}

```

```

        System.out.printf("Account %s has new balance of Rs.%.2f\n",
            first.getAccount(), first.getBalance());
        System.out.println("withdrawing 500 amount");
        first.withdraw(500);
        System.out.printf("Account %s has new balance of Rs.%.2f\n",
            first.getAccount(), first.getBalance());
    }
}

```

Output/:

The screenshot shows the Eclipse IDE interface. The main editor displays the `Account2.java` file with the following code:

```

88 BankAccount2 first = new BankAccount2("12345678", 500);
89
90
91 // print initial balances
92 System.out.printf("Account %s has initial balance of Rs.%.2f\n",
93     first.getAccount(), first.getBalance());
94
95
96
97
98
99
100 try{
101     first.withdraw(1000);
102 }catch(Exception e){System.out.println("Exception occurred: "+e);}
103 System.out.println("deposited 2000 amount");
104 first.deposit(2000);
105 System.out.printf("Account %s has new balance of Rs.%.2f\n",
106     first.getAccount(), first.getBalance());
107 System.out.println("withdrawing 500 amount");
108 first.withdraw(500);
109 System.out.printf("Account %s has new balance of Rs.%.2f\n",
110     first.getAccount(), first.getBalance());
111
112 }
113 }
114

```

The Package Explorer on the left shows the project structure, including `MyProject` and `MyPack`. The Outline view on the right shows the class hierarchy, including `LessBalanceException` and `BankAccount2`.

The Console view at the bottom shows the output of the program:

```

<terminated> Account2 [Java Application] C:\Program Files\Java\jdk-16\bin\javaw.exe (22-Jun-2021, 11:53:34 am - 11:53:34 am)
Account 12345678 has initial balance of Rs.-500.00
Exception occurred: MyPack.LessBalanceException: Withdrawing amount 1000.0 is Not valid
deposited 2000 amount
Account 12345678 has new balance of Rs.2500.00
withdrawing 500 amount
Account 12345678 has new balance of Rs.2000.00

```