Qu1 : Cricket player information:

```
import java.io.*;
import java.util.*;
class cricket
{
        String name;
        int inn,out,runs,avg;

        cricket()
        {
                name = "Dhoni";
                inn = 80;
                out = 10;
                runs = 5000;

        }

        cricket(String name,int inn,int out,int runs)
        {
                this.name= name;
                this.inn= inn;
                this.out=out;
                this.runs=runs;
        }
        static void avgs(cricket c[])
        {
                for(int i=0;i<c.length;i++)
                        c[i].avg = c[i].runs / c[i].inn ;
        }
        static void sort(cricket c[])
        {
                int i,j;
                 cricket c1= new cricket();
                for(i=0;i<c.length;i++)
                {
                        for(j=i+1;j<c.length;j++)
                        {
                                if(c[i].avg > c[j].avg)
                                {
                                   c1 = c[i];
                                   c[i]=c[j];
                                   c[j]=c1;
                                }
                        }
                }
       }

        void display()
        {
                System.out.println("Player name is:: "+name+ "\n Player
innings played are" +inn+ " \n Number of times out " +out+"\n Total runs
are " +runs+"\n Batting average is " +this.avg);
        }


        public static void main(String args[])
        {
```

```
                Scanner sc =new Scanner(System.in);

                System.out.println("********** Default
Information*********");
                cricket c1 =new cricket();
                c1.display();

                int n,i;
                String name;
                int inn,out,runs,avg;

                System.out.println("How many player information you
want");
                n = sc.nextInt();
                cricket c[] = new cricket[n];
                for(i =0;i<n;i++)
                {
                        System.out.println("Enter the player name");
                        name= sc.next();
                        System.out.println("Enter the player innings
played");
                        inn=sc.nextInt();
                        System.out.println("Enter the player number of
times out");
                        out=sc.nextInt();
                        System.out.println("Enter the players total
runs");
                        runs=sc.nextInt();
                        c[i]=new cricket(name,inn,out,runs);
                }
                System.out.println("**********Player
Information*********");

                avgs(c);
                for(i =0;i<n;i++)
                          c[i].display();

                sort(c);

                System.out.println("**********Player  Information after
sorting according to batting avg*********");

                 for(i =0;i<n;i++)
                         c[i].display();

                }
}
```

Qu 2. Bank class example

```
import java.io.*;
import java.util.*;
class bank
{
        double balance;
```

```
        bank()
        {
                balance = 0;
        }

        bank(double inbalance)
        {
                balance = inbalance;
        }

        public void deposite(double amount)
        {
                balance = balance + amount;
        }

        public void withdraw(double amount)
        {
                balance = balance - amount;
        }

        public double getbalance()
        {
                return balance;
        }

        public static void main(String args[])
        {
                bank b=new bank(1000);
                b.withdraw(250);
                System.out.println("After the withdraw balance is::"
+b.balance);
                b.deposite(650);
                System.out.println("After the deposite balance is::"
+b.balance);
                System.out.println("After the all the transction balance
is::" +b.getbalance());
        }
}
```

Qu 3 Clock class example

```
import java.io.*;
import java.util.*;
class clock
{
        int h,m,s;

        clock()
        {
            Scanner sc = new Scanner(System.in);
            System.out.println("Enter the hours");
            h = sc.nextInt();
            System.out.println("Enter the mins");
            m = sc.nextInt();
            System.out.println("Enter the secs");
            s = sc.nextInt();
```

```
        }

        void isTimevalid()
        {
                if(h>=0 && h<=24 && m>=0 && m<=60 && s>=0 && m<=60)
                        System.out.println("Time is Valid");
                else
                        System.out.println("Time is not Valid");
        }

        void setTime()
        {
                if(h < 12)
                        System.out.println(" Time is:: "+h+":"+m+":"+s+
"AM");
                else
                {
                        h=h-12;
                        System.out.println(" Time is:: "+h+":"+m+":"+s+
"PM");
                }
        }

        public static void main(String args[])
        {
                clock c = new clock();
                c.isTimevalid();
                c.setTime();
        }
}
```

Qu 4 package demo program

step 1: create a folder mypack (mkdir mypack)
step 2 : create java file demo.java inside the folder mypack (vim demo.java)

```
package mypack;
public class demo
{

        public void display()
                {
                        System.out.println(" I am in package mypack");
                }
}
```

step 3: compile the above file (javac demo.java)

step 4 : create the main file outside the folder "mypack" whic will access that package. (vim pdemo.java)

```
import mypack.*;
import java.io.*;
public class pdemo
{
      public static void main(String args[])
```

```
            {
                  demo d=new demo();
                  d.display();
            }
}
```

Step 5: compile the file (javac pdemo.java)
Step 6: Run the file (java pdemo)

Qu 5 Student result display package program

```
package SY;
import java.util.*;
public class syclass
{
      public int ct,mt,et;

      public void getdata()
            {
                  Scanner sc = new Scanner(System.in);
                  System.out.println("Enter the marks of computer out off
100");
                  ct = sc.nextInt();
                  System.out.println("Enter the marks of maths out off
100");
                        mt = sc.nextInt();
                  System.out.println("Enter the marks of electronics out
off 100");
                        et = sc.nextInt();

            }
}
```

```
package TY;
import java.util.*;
public class tyclass
{
      public     int th,prac;

      public void getdata()
            {
                  Scanner sc = new Scanner(System.in);
                  System.out.println("Enter the marks of theory out off
500");
                  th = sc.nextInt();
                  System.out.println("Enter the marks of practical out off
500");
                        prac = sc.nextInt();
            }
}
```

```
import SY.*;
import TY.*;
import java.util.*;
class student
{
        int rno,syt,tyt,gt;
        String name,grade;
        float per;

        public void getdata()
                {
                        Scanner sc = new Scanner(System.in);
                        System.out.println("Enter the roll number");
                        rno = sc.nextInt();
                        System.out.println("Enter the name of student");
                        name = sc.next();
                }
}
class studentinfo
{
   public static void main(String args[])
        {
                Scanner sc = new Scanner(System.in);
                int i,n;

                System.out.println("How many student you want");
                n=sc .nextInt();


                student si[] = new student[n];
                syclass s[] =new syclass[n];
                tyclass t[]= new tyclass[n];

                System.out.println("Enter " +n+ "records");

                for(i=0;i<n;i++)
                {
                        si[i]=new student();
                        s[i]=new syclass();
                        t[i]= new tyclass();

                        si[i].getdata();
                        s[i].getdata();
                        t[i].getdata();

                        si[i].syt=s[i].ct + s[i].mt + s[i].et;
                        si[i].tyt = t[i].th + t[i].prac;

                        si[i].gt = si[i].syt + si[i].tyt;

                        si[i].per = si[i].gt / 13;

                        if(si[i].per >= 70)
                                si[i].grade="A";

                        else if(si[i].per < 70 && si[i].per >=60 )
```

```
                                si[i].grade="B";

                        else if(si[i].per < 60 && si[i].per >=50)
                                si[i].grade="C";

                        else if(si[i].per < 50 && si[i].per >=40)
                                si[i].grade="PASS";
                        else
                                si[i].grade = "Fail";
                }

                System.out.println("**************Student
Information************");
                System.out.println("Roll number \t Name \t SY total \t TY
total  \t Grand total \t Percenatge \t Grade");
                for(i=0;i<n; i++)
        System.out.println(si[i].rno + "\t" + si[i].name +"\t" +
si[i].syt + "\t" + si[i].tyt +"\t" +si[i].gt +"\t" +si[i].per + "\t" +
si[i].grade);
        }
}
```

Qu 6 Student Package program

```
package student1;
import java.io.*;
import java.util.*;
public class studentinformation
{
        public  int rno;
        public String Class,name;
        public double per;

        public studentinformation(int rno,String name,String Class,double
per)
        {
                this.rno =rno;
                this.name =name;
                this.Class = Class;
                this.per = per;
        }
        public void display()
        {
                System.out.println(rno+"\t"+name+"\t"+Class+"\t"+per);
        }
}


import student1.*;
import java.io.*;
import java.util.*;
public class studentper
{
        public static double percentage(int total)
        {
```

```
                return (total/5);
        }

        public static void main(String args[])
        {
                int rno,n,total,i,j;
                String Class,name;
                double per;
                Scanner sc =new Scanner(System.in);
                int m[]=new int[5];

                System.out.println("How many student you want");
                n = sc.nextInt();

                studentinformation s[]=new studentinformation[n];

                for(i=0;i<n;i++)
                {
                        total=0;
                        System.out.println("Enter rno");
                        rno=sc.nextInt();
                        System.out.println("Enter student name");
                        name=sc.next();
                        System.out.println("Enter the Class");
                        Class = sc.next();
                        System.out.println("Enter marks of five
subject");
                        for(j=0;j<5;j++)
                        {

                                m[i]=sc.nextInt();
                                total = total + m[i];

                        }

                        per = percentage(total);

                        s[i]=new studentinformation(rno,name,Class,per);
                }
                System.out.println("******** Student
onformation**************");
                System.out.println("Rollno--Name--Class--Percentage ");
                for(i=0; i<n;i++)
                        s[i].display();
        }
}
```