**Slip18**

[November 21, 2023](https://nilambariblogfortybsc-cs.blogspot.com/2023/11/slip18.html)

 Q1) Write a program to implement Border Layout Manager. [10 marks]

 import java.awt.\*;

import java.awt.event.\*;

public class BorderLayoutExample

{

  public static void main(String[] args)

{

  Frame frame= new Frame("BorderLayout Frame");

  frame.setLayout(new BorderLayout(10,10));

Button b1=new Button("NORTH");

  frame.add(b1, BorderLayout.NORTH);

  frame.add(new Button("SOUTH"), BorderLayout.SOUTH);

  frame.add(new Button("EAST"), BorderLayout.EAST);

  frame.add(new Button("WEST"), BorderLayout.WEST);

  frame.add(new Button("CENTER"), BorderLayout.CENTER);

  frame.setSize(300,300);

  frame.setVisible(true);

  }

}

Q2) Define a class CricketPlayer (name,no\_of\_innings,no\_of\_times\_notout, totatruns, bat\_avg). Create an array of n player objects. Calculate the batting average for each player using static method avg(). Define a static sort method which sorts the array on the basis of average. Display the player details in sorted order.

import java.io.\*;

class CricketPlayer

{

String Name;

int no\_of\_ings;

int no\_of\_notout;

int total\_runs;

float bat\_avg;

public CricketPlayer()

{

Name="";

no\_of\_ings=0;

no\_of\_notout=0;

total\_runs=0;

bat\_avg=0.0f;

}

public CricketPlayer(String n,int i,int o,int r)

{

Name=n;

no\_of\_ings=i;

                no\_of\_notout=o;

         total\_runs=r;

        }

public static void average(CricketPlayer c[])

{

int n=c.length;

for(int i=0;i<n;i++)

c[i].bat\_avg=(float)c[i].total\_runs/c[i].no\_of\_ings;

}

     public  static void sortPlayer(CricketPlayer c[])

{

int n=c.length;

for(int i=0;i<n;i++)

{

for(int j=i+1;j<n;j++)

{

if(c[i].bat\_avg < c[j].bat\_avg)

      {

String temp=c[i].Name;

int t=c[i].no\_of\_ings;

int e=c[i].no\_of\_notout;

int p=c[i].total\_runs;

float m=c[i].bat\_avg;

 c[i].Name=c[j].Name;

                                c[i].no\_of\_ings=c[j].no\_of\_ings;

                                c[i].no\_of\_notout=c[j].no\_of\_notout;

                                c[i].total\_runs=c[j].total\_runs;

                                c[i].bat\_avg=c[j].bat\_avg;

 c[j].Name=temp;

                                c[j].no\_of\_ings=t;

                                c[j].no\_of\_notout=e;

                                c[j].total\_runs=p;

                                c[j].bat\_avg=m;

    }

}

}

}

void print()

{

System.out.println("Name="+Name);

System.out.println("No\_Of\_Innings="+no\_of\_ings);

System.out.println("No\_times\_notout="+no\_of\_notout);

System.out.println("Total Runs="+total\_runs);

System.out.println("Average="+bat\_avg);

System.out.println("-----------------------------");

}

}

class  Ass4setA1

{

public static void main(String a[])throws IOException

{

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter how many players");

int n=Integer.parseInt(br.readLine());

CricketPlayer cp[]= new CricketPlayer[n];

System.out.println("Enter players");

 for(int i=0;i<n;i++)

 {

System.out.println("Enter name,innings,notout,total runs");

String na=br.readLine();

int g=Integer.parseInt(br.readLine());

int o=Integer.parseInt(br.readLine());

int t=Integer.parseInt(br.readLine());

cp[i]=new CricketPlayer(na,g,o,t);

average(cp);

}

CricketPlayer.sortPlayer(cp);

for(int i=0;i<n;i++)

cp[i].print();

}

}