1. import java.util.*;

class quadratic {

Public static void main (String args[]) {

Scanner in = new Scanner (System.in);

System.out.println ("Enter the coefficients no.'s a, b, c :");

int a = in.nextInt();

int b = in.nextInt();

int c = in.nextInt();

double dis = (b*b) - 4*a*c;

if (dis < 0) {

System.out.println("No real roots present");

}

else if (dis == 0) {

root1 = Math.pow(-b + dis) / 2*a, 0.5);

root2 = Math.pow(-b - dis) / 2*a, 0.5);

System.out.println("The roots are real and equal : " + root1);

}

else {

root1 = (-b + dis) / 2*a;

root2 = (-b - dis) / 2*a;

System.out.println("The roots are : " + root1 + " and " + root2);

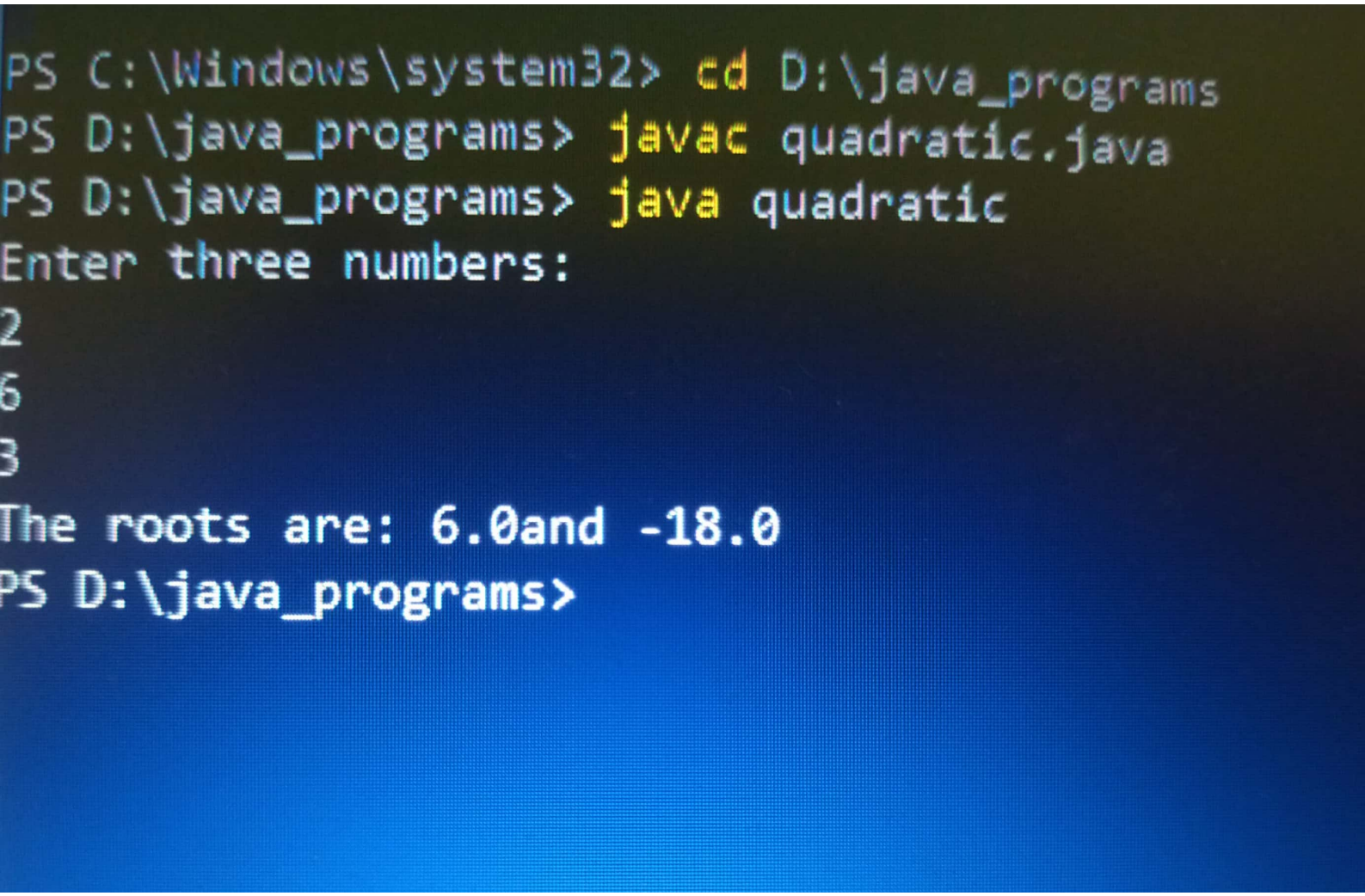
```
import java.util.*;
class player {
  int id;
String name;
int n;
double scores[];
double sum = 0.0;
player() {
Scanner in = new Scanner (System.in);
System.out.println("Enter no. of matches played by
                    player: ");

  n = in.nextInt();
System.out.println("score scored in each match: ");
scores = new double[n];
for(int i=0; i<n; i++) {
  scores[i] = in.nextDouble();

}
}
double avgscore() {
for(int i=0; i<n; i++) {
sum += scores[i];
}
return sum/n;
}
```

```
void display() {
System.out.println("Details of the best player among two");
System.out.println("Name: " + name);
System.out.println("id: " + id);
System.out.println("No. of matches played: " + n);
System.out.println("scores scored in every match:");
for(int i=0; i<n; i++) {
System.out.println(st.scores[i]);
}
}
}

class player {
Public static void main(String args[]) {
Player p1 = new player();
Player p2 = new player();
double avg1 = 0.0, avg2 = 0.0;
avg1 = p1.avg_score();
System.out.println("avg score of player 1: "+avg1);
avg2 = p2.avg_score();
System.out.println("avg score of player 2: "+avg2);
```

```
if (avg1 > avg2) {
System.out.println("average of player 1 is
greater:");

p1.display();
}
else
{
System.out.println("Avg of player 2 is greater
p2.display();

}
}
}
```

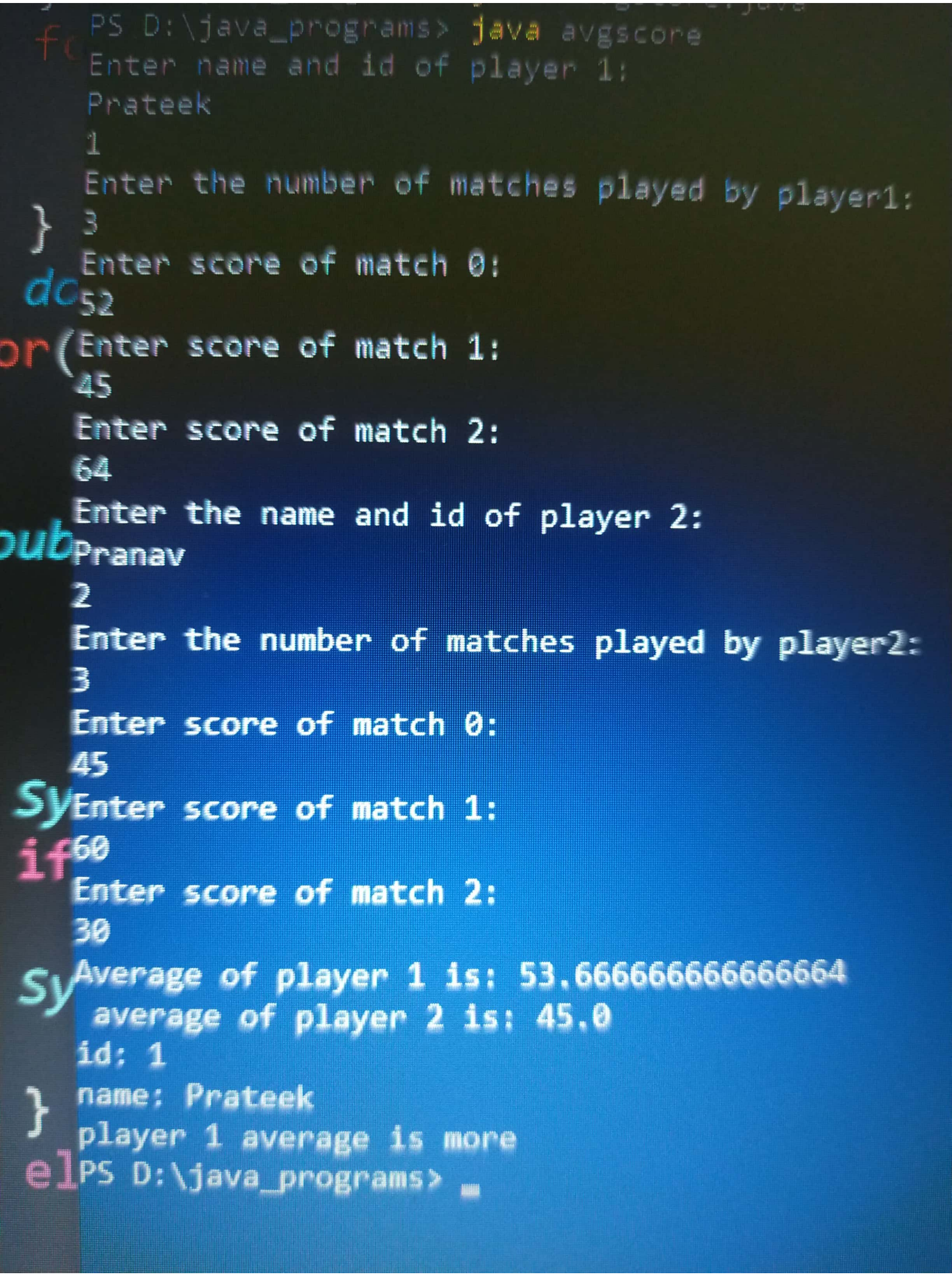
quadratic.java

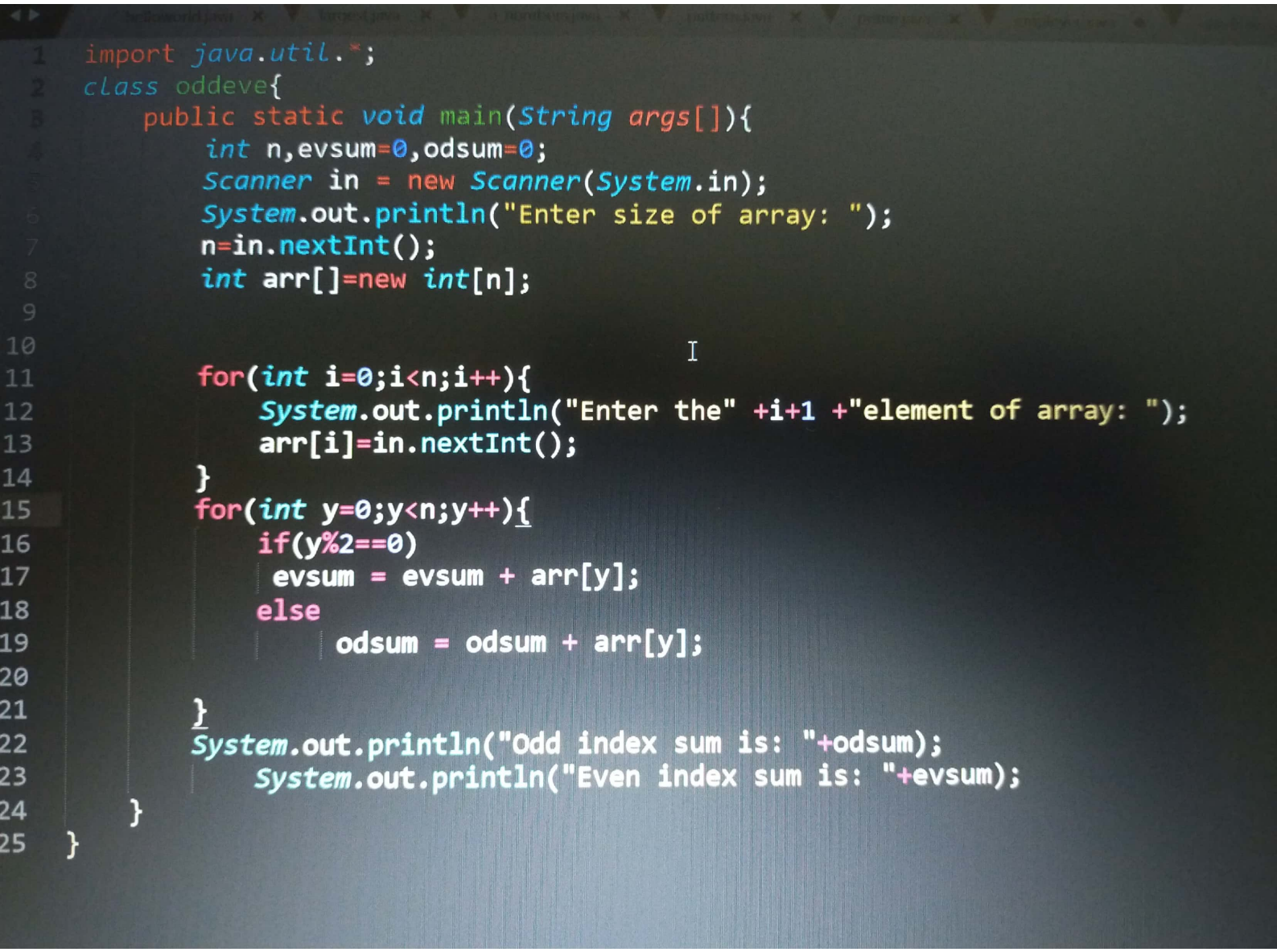
```java
import java.util.*;
import java.lang.Math;
class quadratic{
    public static void main(String args[]){
        double root1;
        double root2;
        Scanner in = new Scanner(System.in);
        System.out.println("Enter three numbers: ");
        int a=in.nextInt();
        int b=in.nextInt();
        int c=in.nextInt();
        double dis=(b*b)-4*a*c;
        if(dis<0){
         System.out.println("No real roots present");
        }
        else if(dis==0){
          root1 = Math.pow((-b+dis)/2*a, 0.5);
          root2 =  Math.pow((-b-dis)/2*a,0.5);
         System.out.println("The roots are real and equal: "+root1);
    }
    else{
        root1 = (-b+dis)/2*a;
         root2 = (-b-dis)/2*a;
         System.out.println("The roots are: "+root1 + "and "+root2);

    }
    }
}
```



```java
import java.util.*;
class Player{
int id;
String name;
int n;
double scores[];
double  sum=0.0;


Player(){
Scanner in=new Scanner(System.in);
System.out.println("Enter the name and id of the player");
name = in.nextLine();
id = in.nextInt();
System.out.println("Enter number of matches played by the player :")
n=in.nextInt();
System.out.println("No of scores scored by played in every match :")
scores=new double[n];
for(int i=0;i<n;i++)
{
scores[i]=in.nextDouble();
}


}


double avg_score(){
for(int i=0;i<n;i++)
{
sum+=scores[i];
}
return sum/n;
}
```

```
System.out.println("No of scores scored by played in every match :");
for(int i=0;i<n;i++)
{
System.out.println(+scores[i]);
}
}
}
class player{
public static void main(String args[]){

Player p1=new Player();
Player p2=new Player();

double avg1=0.0,avg2=0.0;

avg1=p1.avg_score();
System.out.println("Average score of player1."+avg1);

avg2=p2.avg_score();
System.out.println("Average score of player2."+avg2);

if(avg1>avg2)
{
System.out.println("Average score of player1 is greater :");
p1.display();
}
else
{
System.out.println("Average score of player2 is greater :");
p2.display();
}
}
```





```java
import java.util.*;
class oddeve{
    public static void main(String args[]){
        int n,evsum=0,odsum=0;
        Scanner in = new Scanner(System.in);
        System.out.println("Enter size of array: ");
        n=in.nextInt();
        int arr[]=new int[n];


        for(int i=0;i<n;i++){
            System.out.println("Enter the" +i+1 +"element of array: ");
            arr[i]=in.nextInt();
        }
        for(int y=0;y<n;y++){
            if(y%2==0)
             evsum = evsum + arr[y];
            else
                 odsum = odsum + arr[y];

        }
        System.out.println("Odd index sum is: "+odsum);
            System.out.println("Even index sum is: "+evsum);
    }
}
```

```
PS D:\java_programs> java oddeve
Enter size of array:
3
Enter the0lelement of array:
3
Enter the1lelement of array:
4
Enter the2lelement of array:
6
Odd index sum is: 4
Even index sum is: 9
PS D:\java_programs>
```

```java
import java.util.*;
class posneg{
    public static void main(String args[]){
        int n,countpos=0,countneg=0,countzer=0;
        Scanner in = new Scanner(System.in);

        System.out.println("Enter size of array: ");
        n=in.nextInt();
        int arr[]=new int[n];

        // accepting the elements
        for(int i=0;i<n;i++){
            System.out.println("Enter the" +i +"element of array: ");
            arr[i]=in.nextInt();
        }
        for(int x=0;x<n;x++){
            if(arr[x]>0)
             countpos=countpos+1;
            else if(arr[x]<0)
                 countneg = countneg + 1;
                else if(arr[x]==0)
                    countzer=countzer+1;
            }
            System.out.println("The number of postive numbers are: "+countpos +"\nThe number

        }
    }
```