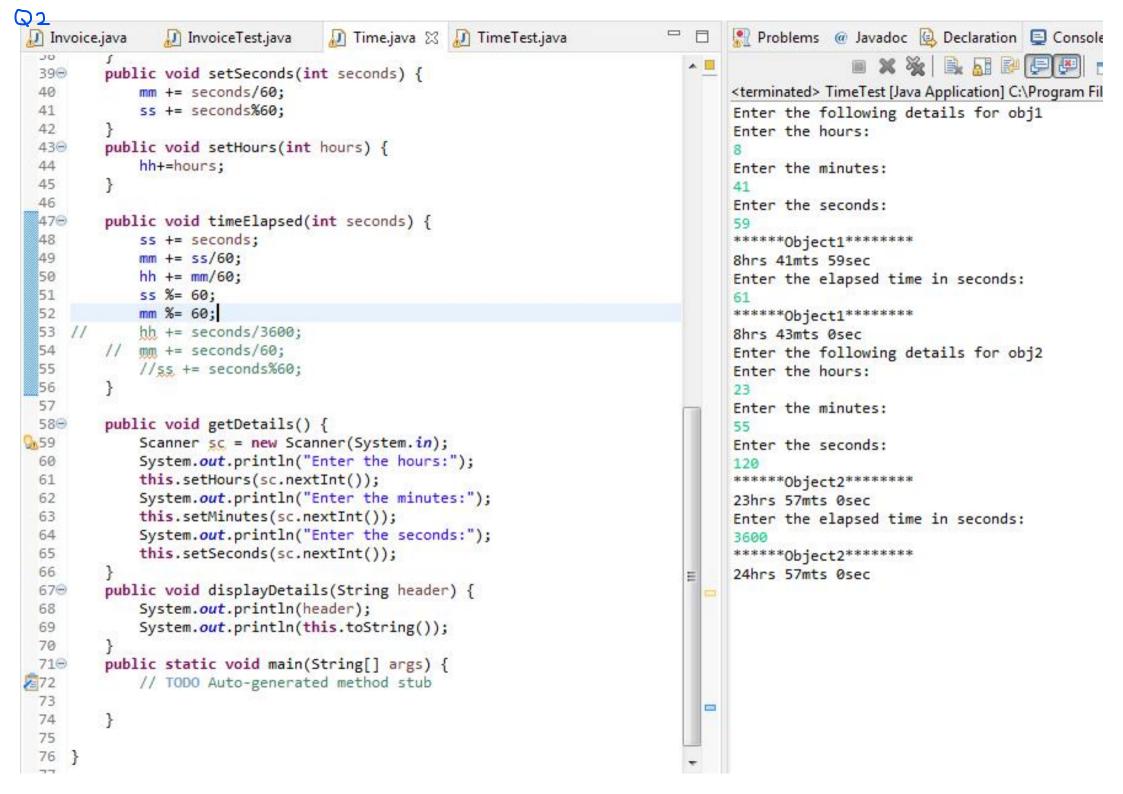




```
🧖 Problems @ Javadoc 📵 Declaration 📮 Console 🛭
                                   🕡 Time.java 🛭 🕡 TimeTest.java
Invoice.java

↓ InvoiceTest.java

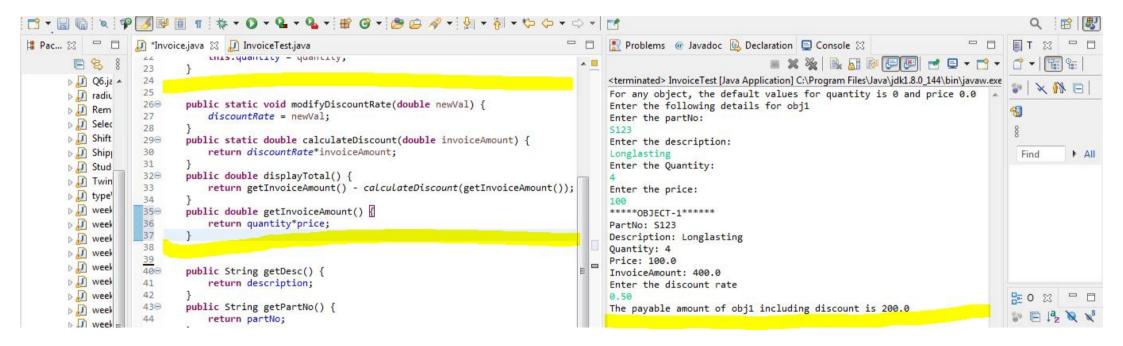
                                                                                                1 package lab4;
                                                                             A .
  2 import java.util.*;
                                                                                  <terminated> TimeTest [Java Application] C:\Program Files\Java\jdk1.8.0_
  3 public class Time {
                                                                                  Enter the following details for obj1
         private int ss,mm,hh;
                                                                                  Enter the hours:
  60
         Time(){
                                                                                  Enter the minutes:
             ss = 0;
                                                                                  41
  8
             mm = 0:
                                                                                  Enter the seconds:
  9
             hh = 0;
 10
                                                                                  ******Object1******
 11
                                                                                  8hrs 41mts 59sec
        Time(int hh, int mm, int ss){
 120
                                                                                  Enter the elapsed time in seconds:
 13
             this.ss = ss:
 14
             this.mm = mm:
                                                                                  ******Object1*****
 15
            this.hh = hh;
                                                                                  8hrs 43mts 0sec
 16
             this.mm += this.ss/60;
                                                                                  Enter the following details for obj2
 17
            this.hh += this.mm/60;
                                                                                  Enter the hours:
 18
            this.ss %= 60;
                                                                                  23
            this.mm %= 60;
 19
                                                                                  Enter the minutes:
 20
        }
 21
                                                                                  Enter the seconds:
▲229
         public String toString() {
             return hh+"hrs "+mm+"mts "+ss+"sec ";
 23
                                                                                  ******Object2*****
 24
                                                                                  23hrs 57mts 0sec
 25
                                                                                  Enter the elapsed time in seconds:
 26⊕
         public int getMinutes() {
                                                                                  3600
 27
             return mm;
                                                                                  ******Object2******
 28
                                                                                  24hrs 57mts Øsec
         public int getSeconds() {
 29⊕
 30
             return ss;
 31
         public int getHours() {
 32⊕
 33
             return hh;
 34
 35@
         public void setMinutes(int minutes) {
                                                                               hh += minutes/60;
 36
             mm += minutes%60;
 37
 38
```





```
🚺 Invoice.java 🔝 🚺 InvoiceTest.java
                                   J Time.java
                                                  💹 TimeTest.java 🖂
                                                                                   🧖 Problems @ Javadoc 🙆 Declaration 📮 Console
  1 package lab4;
                                                                              A |
                                                                                                       2 import java.util.*;
                                                                                   <terminated> TimeTest [Java Application] C:\Program Files
    public class TimeTest {
                                                                                   Enter the following details for obj1
  4
                                                                                   Enter the hours:
        public static void main(String[] args) {
  5⊕
            // TODO Auto-generated method stub
 6
                                                                                   Enter the minutes:
            Scanner sc = new Scanner(System.in);
            Time obj1 = new Time();
  8
                                                                                   Enter the seconds:
 9
            System.out.println("Enter the following details for obj1");
                                                                                   59
 10
            obj1.getDetails();
                                                                                   *******Object1******
            obj1.displayDetails("*****Object1*******"):
 11
                                                                                   8hrs 41mts 59sec
12
            System.out.println("Enter the elapsed time in seconds:");
                                                                                   Enter the elapsed time in seconds:
13
            obj1.timeElapsed(sc.nextInt());
 14
            obj1.displayDetails("******Object1*******");
                                                                                   *******Object1******
15
                                                                                   8hrs 43mts 0sec
16
                                                                                   Enter the following details for obj2
17
                                                                                   Enter the hours:
 18
            int hours, minutes, seconds;
                                                                                   23
            System.out.println("Enter the following details for obj2");
19
                                                                                   Enter the minutes:
 20
            System.out.println("Enter the hours:");
                                                                                   55
 21
            hours = sc.nextInt();
                                                                                   Enter the seconds:
            System.out.println("Enter the minutes:");
 22
                                                                                   120
23
            minutes = sc.nextInt();
                                                                                   ******Object2******
            System.out.println("Enter the seconds:");
 24
                                                                                   23hrs 57mts 0sec
25
            seconds = sc.nextInt();
                                                                                   Enter the elapsed time in seconds:
 26
                                                                                   3600
27
                                                                                   ******Object2*****
 28
            Time obj2 = new Time(hours, minutes, seconds);
                                                                                   24hrs 57mts 0sec
            obj2.displayDetails("******Object2*******");
29
            System.out.println("Enter the elapsed time in seconds:");
30
31
            obj2.timeElapsed(sc.nextInt());
            obj2.displayDetails("******Object2*******");
32
33
 34
35
36
```





Q3.

```
📳 Problems @ Javadoc 🗟 Declaration 📮 Console 🔀
                                                                                                                                                    *Invoice.java
                                                                                                                 1 package lab4;
                                                                              A .
  2 import java.util.*;
                                                                                    <terminated> InvoiceTest [Java Application] C:\Program Files\Java\jdk1.8.0_144\bin\javaw.exe
  3 public class InvoiceTest {
                                                                                    For any object, the default values for quantity is 0 and price 0.0
                                                                                    Enter the following details for obj1
        public static void main(String[] args) {
                                                                                    Enter the partNo:
 6
            // TODO Auto-generated method stub
                                                                                    5123
            Scanner sc = new Scanner(System.in);
                                                                                    Enter the description:
 8
            Invoice obj1 = new Invoice();
                                                                                    Longlasting
            System.out.println("For any object, the default values"
 9
                                                                                    Enter the Quantity:
                    + " for quantity is "+obj1.getQuantity()+" and price "
 10
 11
                    +obj1.getPrice());
                                                                                    Enter the price:
            System.out.println("Enter the following details for obj1");
 12
                                                                                    100
 13
            obj1.getDetails();
                                                                                    *****OBJECT-1*****
            obj1.displayDetails("*****OBJECT-1******");
 14
                                                                                    PartNo: S123
 15
                                                                                    Description: Longlasting
 16
            System.out.println("Enter the discount rate");
                                                                                    Quantity: 4
 17
            Invoice.discountRate = sc.nextDouble();
                                                                                    Price: 100.0
 18
                                                                                    InvoiceAmount: 400.0
            System.out.println("The payable amount of obj1 "
19
                                                                                    Enter the discount rate
 20
                    + "including discount is "+obj1.displayTotal());
21
                                                                                    The payable amount of obj1 including discount is 200.0
22
```

Q4.

```
this.ss %= 60;
    this.mm %= 60;
public String equals(Time T2) {
    if(this.hh > T2.hh)return "Greater";
    else if(this.hh < T2.hh)return "Smaller";
    else if(this.mm > T2.mm)return "Greater";
    else if(this.mm < T2.mm)return "Smaller";
    else if(this.ss > T2.ss)return "Greater";
    else if(this.ss < T2.ss)return "Smaller";
    else return "Equal";
Time addtime(Time T1, Time T2) {
    Time T3 = new Time(T1.hh+T2.hh,T1.mm+T2.mm,T1.ss+T2.ss)
    return T3;
public String display(int i) {
    String timeRep="";
    if(i == 1)timeRep += (hh)+":"+mm+":"+ss;
    else if(this.hh>=12) {
        timeRep += (hh-12)+":"+mm+":"+ss+"P.M.
    else
        timeRep += (hh)+":"+mm+":"+ss+"A.M. ";
    return timeRep;
public String toString() {
    return hh+"hrs "+mm+"mts "+ss+"sec ";
```

```
<terminateg> Time Lest (Java Application) C:\Program Files\Java\jgk1.8.U_144\
Enter the following details for obj1
Enter the hours:
13
Enter the minutes:
Enter the seconds:
*******Object1******
13hrs 45mts 23sec
*******Object1******
13hrs 45mts 23sec
Enter the following details for obj2
Enter the hours:
Enter the minutes:
Enter the seconds:
******Object2******
5hrs 6mts 7sec
*******Object2******
5hrs 6mts 7sec
Is object1's time >,< or equal to object2's time? Greater
Displaying Object1's time 13hrs 45mts 23sec
Displaying Object1's time in 12hr format 1:45:23P.M.
Displaying Object1's time in 24hr format 13:45:23
Adding time of object1 and object2, we get object 3
******Object3******
18hrs 51mts 30sec
```



```
Problems @ Javadoc  Declaration  Console  Console  
🞵 Invoice.java 💢 🎵 InvoiceTest.java
                                  *Time.java
                                                 publi Close ic void main(String) | args) {
                                                                                                                  A 📙
 6
             // TODO Auto-generated method stub
                                                                                               <terminated> TimeTest [Java Application] C:\Program Files\Java\jdk1.8.0_144\bin
  7
             Scanner sc = new Scanner(System.in);
                                                                                               Enter the following details for obj1
  8
            Time obj1 = new Time();
                                                                                               Enter the hours:
 9
            System.out.println("Enter the following details for obj1");
                                                                                               13
 10
            obj1.getDetails();
            obj1.displayDetails("******Object1*******"):
                                                                                               Enter the minutes:
 11
 12 /*
            System.out.println("Enter the elapsed time in seconds:");
 13
             obil.timeElapsed(sc.nextInt());
                                                                                               Enter the seconds:
 14 */
            obj1.displayDetails("******Object1*******");
                                                                                               *******Object1******
 15
16
             int hours, minutes, seconds;
                                                                                               13hrs 45mts 23sec
                                                                                               *******Object1******
17
             System.out.println("Enter the following details for obj2");
 18
             System.out.println("Enter the hours:");
                                                                                               13hrs 45mts 23sec
 19
             hours = sc.nextInt();
                                                                                               Enter the following details for obj2
 20
            System.out.println("Enter the minutes:");
                                                                                               Enter the hours:
 21
            minutes = sc.nextInt();
                                                                                               Enter the minutes:
 22
            System.out.println("Enter the seconds:");
 23
             seconds = sc.nextInt();
 24
                                                                                               Enter the seconds:
 25
                                                                                               *******Object2*****
 26
            Time obj2 = new Time(hours, minutes, seconds);
            obi2.displayDetails("******Object2*******");
 27
                                                                                               5hrs 6mts 7sec
                                                                                               ******Object2*****
 28 /*
            System.out.println("Enter the elapsed time in seconds:");
 29
                                                                                               5hrs 6mts 7sec
             obj2.timeElapsed(sc.nextInt());
            obj2.displayDetails("******Object2*******");
 30 */
                                                                                               Is object1's time >,< or equal to object2's time? Greater
                                                                                               Displaying Object1's time 13hrs 45mts 23sec
 31
32
             System.out.println("Is object1's time >,"
                                                                                               Displaying Object1's time in 12hr format 1:45:23P.M.
 33
                                                                                               Displaying Object1's time in 24hr format 13:45:23
                    + "< or equal to object2's time? "+obj1.equals(obj2));
 34
                                                                                               Adding time of object1 and object2, we get object 3
             System.out.println("Displaying Object1's time "+obj1.toString());
                                                                                               *******Object3******
 35
             System.out.println("Displaying Object1's"
                    + " time in 12hr format "+obj1.display(0));
 36
                                                                                               18hrs 51mts 30sec
37
            System.out.println("Displaying Object1's "
                    + "time in 24hr format "+obj1.display(1));
 38
 39
 40
41
            Time obj3 = obj1.addtime(obj1,obj2);
42
             System.out.println("Adding time of object1 and object2, we get object 3");
            obj3.displayDetails("******Object3********"):
43
```



