

## Class for Time and operations like read write

```
import java.util.Scanner;
public class Time {
    //data members
    int hour,minute,second;
    //Input function
    public void input()
    {
        Scanner sc=new Scanner(System.in);
        do{
            System.out.print("Enter valid details");
            System.out.print("\nHours:");
            hour=sc.nextInt();
            System.out.print("Minutes:");
            minute=sc.nextInt();
            System.out.print("Seconds:");
            second=sc.nextInt();
        }while(minute>59||second>59); //Repeat the
input process till valid input
    }
    //Function to display time
    public void display()
    {
        System.out.println(hour+"hours
"+minute+"minutes "+second+"second");
    }
    //Function to find greatest time value
    public void great(Time t)
    {
        System.out.println("Greater time value");
        if(hour>t.hour)

        System.out.println(hour+": "+minute+": "+second);
        else

        System.out.println(t.hour+": "+t.minute+": "+t.second
);
    }
}
```

```

        //function to find difference between two time
values
        public void difference(Time t)
        {
            int diff_hour,diff_minute,diff_second;
            //subtract small time value from great
            if(hour>t.hour)
            {
                diff_hour=hour-t.hour;
                diff_minute=minute-t.minute;
                diff_second=second-t.second;
            }
            else
            {
                diff_hour=t.hour-hour;
                diff_minute=t.minute-minute;
                diff_second=t.second-second;
            }
            //If time difference is negative then
converting to positive
            if(diff_minute<0||diff_second<0){
                diff_minute=Math.abs(diff_minute);
                diff_second=Math.abs(diff_second);
            }
            //If seconds greater than 59, increasing
minutes by 1
            if(diff_second>59)
            {
                diff_minute+=1;
                diff_second-=59;
            }
            //If minutes greater than 59,increasing hour by
1
            if(diff_minute>59)
            {
                diff_hour+=1;
                diff_minute-=59;
            }
            System.out.println("\nTime difference:");

```

```

        System.out.println(diff_hour+"hours
"+diff_minute+"minutes "+diff_second+"seconds ");
    }
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        //Objects creation of class
        Time t1=new Time();
        Time t2=new Time();
        System.out.println("Time 1");
        //input value of time 1
        t1.input();
        System.out.println("Time 2");
        //input value of time 2
        t2.input();
        //display time values
        System.out.println("Time value 1:");
        t1.display();
        System.out.println("Time value 2:");
        t2.display();
        //display greater time value
        t1.great(t2);
        //display difference between time values
        t1.difference(t2);
    }
}

```