

### **Question 1: (3.0 Point)**

In this question, you are required to create three threads: **Clock**, **Dog**, and **Person**. They work like what will be described below.

**Clock thread:** display time by every second with the format hh:mm:ss

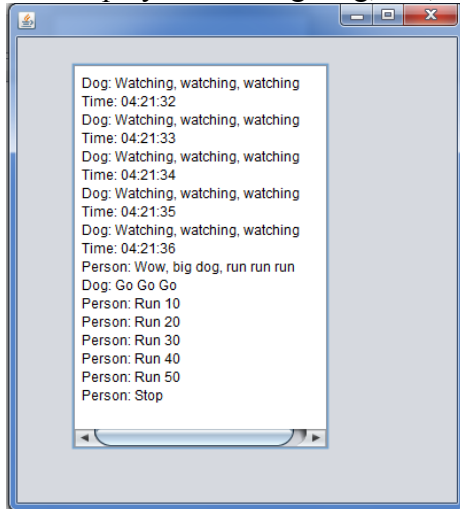
**Dog thread:** every second display “Watching, watching...”

After 5 seconds the dog will bark “Go, go, go, go...” and STOP, finish thread.

**Person thread:** This thread will do nothing until the barked event of a Dog happen.

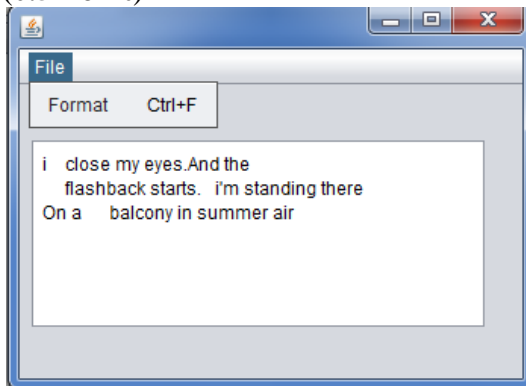
When the dog barked, person will stop walking and run away.

Display: “Wow big Dog, run, run run...”



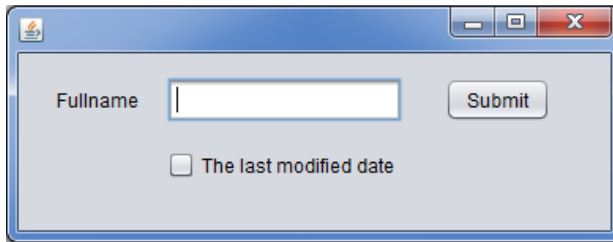
### **Question 2: (3.0 Point)**

Design the form might look something like figure below, named the java file is **AFormat.java** (0.5 Point)



The Frame includes a menu bar with a menuitem (Format, shortcut key included) and a textarea, “i close .... air” is default value of textarea.

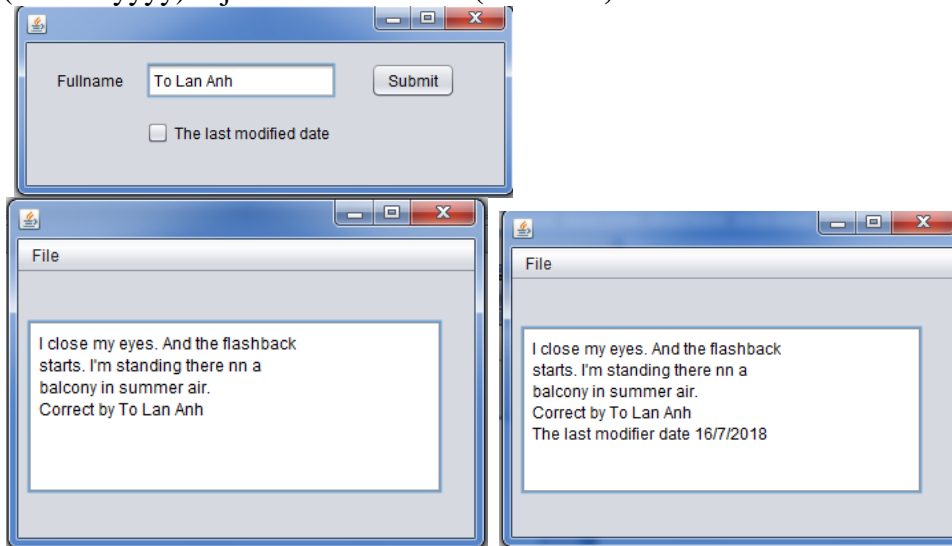
If users select **Format** (or Ctrl\_F key), show a **Format** form which might look something like figure below (0.5 Point)



A Java Swing window with a title bar. Inside, there is a label "Fullname" followed by a text input field. To the right of the input field is a "Submit" button. Below the input field is a checkbox labeled "The last modified date".

The correct sentence: *Capitalize the First Word in a Sentence, one space between words, a space following commas and periods.*

When users enter fullname for textfield and click on **Submit** button, the paragraph in textarea which is replaced by the **correct** paragraph (1.0 Point). Add more the last modified date (dd/mm/yyyy) if jcheckbox selected (1.0 Point).



Three Java Swing windows are shown. The top window is the same as the initial form, but the text input field now contains "To Lan Anh". Below it are two "File" windows. The left "File" window shows a text area with the following text: "I close my eyes. And the flashback starts. I'm standing there nn a balcony in summer air. Correct by To Lan Anh". The right "File" window shows the same text, but with an additional line: "The last modifier date 16/7/2018".

### **Question 3: (4.0 Point)**

Create your MS SQL database named **PMSDB** by running code in script **PMSDB.sql**.

Design the form might look something like figure below, named the java file is **Main.java**

Project ID	Employee ID	Is Full Time	Hours
1	Anhtv20	<input type="checkbox"/>	30
1	Duydt	<input checked="" type="checkbox"/>	150
2	Caupt	<input checked="" type="checkbox"/>	200
3	Hapt3	<input type="checkbox"/>	50
2	Hanhnt	<input checked="" type="checkbox"/>	30
3	Phuongvt	<input checked="" type="checkbox"/>	70

Number of Project member(s): 6

**Search Project member**

Select Project ID

☐ Is full time

When users select jCombobox for Project ID or EmployeeID searching, then enter value in textfield and click Search button, output information of all Project Members in Projectmembers table to below table which have ProjectID or EmployeeID contains entered value also output the number of rows/records found.

No select Is full time				select Is full time			

Output a message “Not found any Project member” if the system could not find any matched Projectmember.

Project ID	Employee ID	Is Full Time	Hours
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Not found any Project member

**Search Project member**

Select Project ID

☐ Is full time