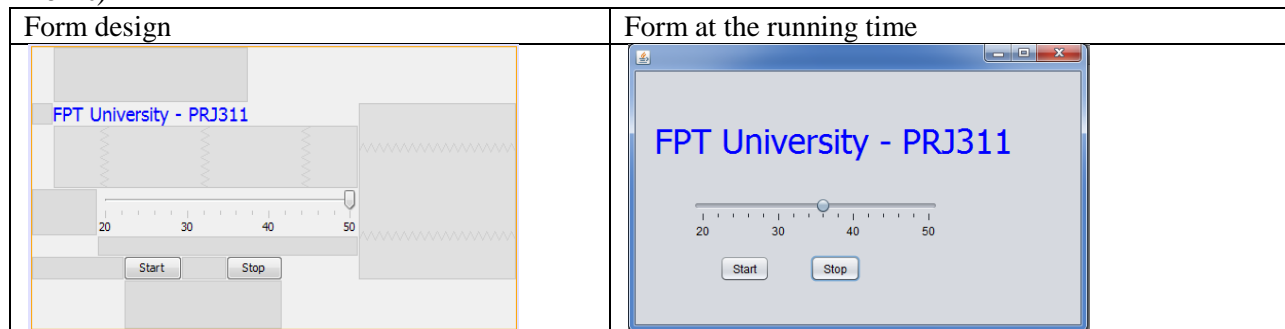


Question 1: (3.0 Point)

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

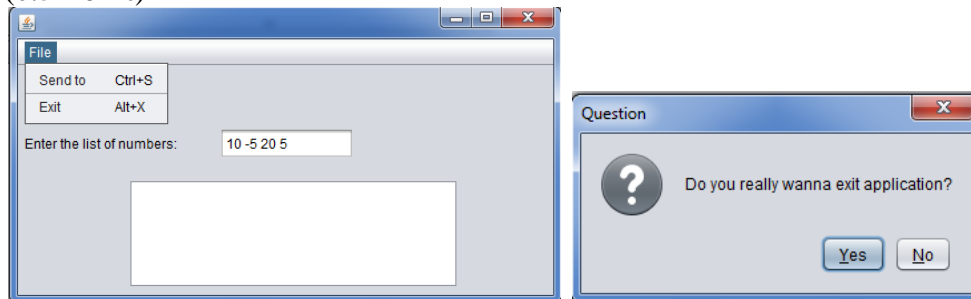


The frame including a label value is “FPT University - PRJ311” and a jslider (min value = 20, max value = 50, minor tick =2, major tick = 10).

At the running time, the value of jslider increases by 2 values after every 200 milisecond. If the value of jslider touches max-value, it starts min-value (0.5 point). When the jslider changes value, this value is updated the font size of a label (2.0 Point).

Question 2: (3.0 Point)

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



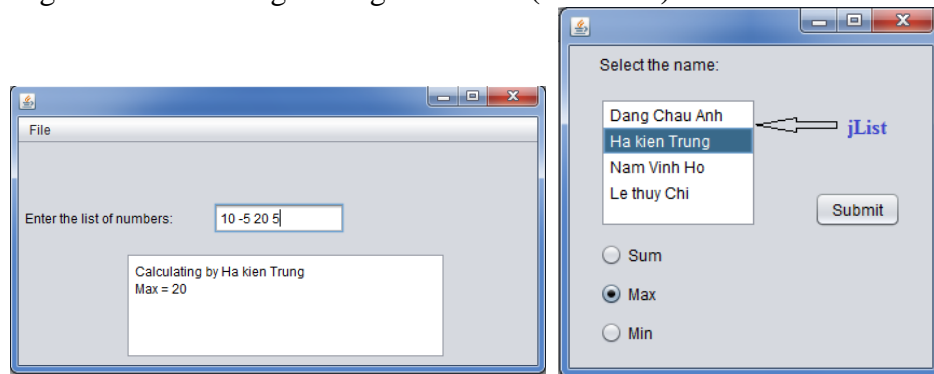
The Frame includes a menu bar with 2 menuitems (Send to and Exit, shortcut key included) and a textfield for enter the list of numbers, a textarea is empty.

If users select Exit (or Alt_x key), show message Question which might look like a figure above (0.5 Point).

If users select **Send to** (or Ctrl_S key), show a **Calculate** form which might look something like figure below (0.5 Point)



When users select the fullname from jList and click on one of 3 jRadiobuttons (Sum, Max, Min) and **Submit** button, Calculate Sum (or Max or Min) of the list of numbers in textfield which might look something like figure below **(1.5 Point)**.



IMPORTANT – before you start doing your solution, MUST do the following steps:

1. Create your MS SQL database named **BookDB** by running code in script **BookDB.sql**.
2. **You MUST use DBContext.java for your all database connection.**

Question 3: (4.0 Point)

Make a search username frame:

When users enter username, do the searching and output information of entered username. Users can update the value for entered username, please note that username is not allowed to updated.

Enter username	<input type="text" value="sa"/>	<input type="button" value="Search"/>
Display name	<input type="text" value="Super Administrator"/>	
Password	<input type="text" value="**"/>	
Description	<input type="text" value="Highest role in the system"/>	
<input type="button" value="Update"/>		

```
create database BookDB
GO
USE [BookDB]
GO
create table Users
(
  UserName nvarchar(255) primary key,
  DisplayName nvarchar(max) not null,
  Password nvarchar(255) not null,
  Description nvarchar(max)
)
go
insert into Users(UserName,DisplayName>Password,Description)
values('sa','Super Administrator','sa','Highest role in the system')
insert into Users(UserName,DisplayName>Password,Description)
values('an','Manager','an','Managers in the system')
insert into Users(UserName,DisplayName>Password,Description)
values('nam','User','nam','Users in the system')
```