Lab Exercise 3

Objective:

Fix a broken texteditor called TextLab, so that it:

- Supports scrolling
- Supports cut, copy and paste of selected text
- Supports changing the font type and/or size of selected text
- Supports saving documents to disk and bringing them back again
- Supports printing

Required files:

`Controller.m and Controller.h`	A custom object which is the target for all action messages
`TextView.m and TextView.h`	A subclass of View which displays a text object within a window
`TextLab_main.m`	Contains `main()` for application
`TextLab.nib`	NIB file for application
`Makefile`	Makefile generated by Interface Builder
`TextLab.iconheader, Textlab.iconlist,`	
`IB.proj`	Files generated by Interface Builder
`textlab.tiff, textlabdoc.tiff`	TIFF files for the application and document icon images
`Solution/`	Directory containing solution

Tasks:

Study Controller.m and TextView.m. Most of the changes required to complete the lab involve these files and the exercises are described in the files together with some hints

The first exercise is to change TextView into a subclass of a ScrollView and make the text object created by the newText: method of TextView.m be the docView of the ScrollView. See the Exercise #1 comment in the newFrame: method of TextView

The second exercise is to implement cut/copy and paste. This will not require any changes to theController or the TextView, but will require using Interface Builder to connect the cut,copy and paste menu items to the application's firstResponder. Note that the browser window has a dummy firstResponder object which you can use to connect the menu items.

The third exercise is to add the capability to change the font of selected text using the

FontManager and the FontPanel. This will not require any changes to theController or TextView classes, but will require using Interface Builder to add the font menu to the main menu. Once you have added the font menu, the sytem automatically creates an instance of the FontManager and FontPanel for you.

As an aside, whenever an item on the font menu is selected or a font is chosen from the FontPanel, the FontManager will automatically send a changeFont: message to the application's firstResponder.

The next exercise is to add the capbility to save documents to disk. This will require adding code to 2 methods of Controller.m, saveInRequest: and saveWindow:inFile:inDir:. It will also require you to use the SavePanel class as well as typedStreams. See the Exercise #4a and Exercise #4b comments in Controller.m.

The final exercise is to implement printing. This will require you to modify the printRequest: method of Controller.m. See the Exercise #5 comment in Controller.m

You will probably need to look at the spec sheets for Application, SavePanel, FontManager and ScrollView to do this lab. You may also find thedocumentation on typedstreams useful.