1. Open the text editor (ask your tutor which editors are currently available).

2. Using the editor type the following program. Make sure you type it **<u>exactly</u>** as it is shown (including capital letters and punctuation marks).

```
// My first java Applet

/* html for appletviewer...
    <title>Example Java Applet</title>
    <applet code="FirstApplet.class"
        width=300 height=300>
    </applet>
*/

import java.awt.*;
import java.applet.Applet;

public class FirstApplet extends Applet
{   public void paint (Graphics g)
    {   int width=20;
        int height=20;
        g.setColor( Color.blue );
        g.drawRect(10, 10, width, height);
        g.drawRect(10, 50, width, height);
        g.drawRect(10,100, width, height);
        g.drawString( "Program Finished", 20, 150 );
    }
}
```

3. When you have finished, save the program in a file called **FirstApplet.java**

4. Open a command window

5. Compile your java program into byte-code by typing the following into the command window:
    **javac FirstApplet.java**

   If you made typing mistakes when you copied the program in the editor some messages will be printed onto the screen, if this happens try to find why the mistakes have occurred & make the necessary changes

6. Execute your translated program by typing the following in the *java* window:
    **appletviewer FirstApplet.java**

   Look at the results.

7. Use the editor to make the following changes to the program. After each change save your program by selecting the **File** menu then the **Save** option then go into the java window and repeat steps 5 and 6 above.

7a. Change the line which reads: **g.drawRect(10, 50, width, height);**
      to:    **g.fillRect(10, 50, width, height);**

7b. Insert an extra line containing the following text above the line you have just changed (your tutor will explain how to use the editor to insert a new line):
      **g.setColor( Color.red );**

7c. Change the line which reads:
      **g.drawString( "Program Finished", 20, 150 );**
      to:    **g.drawString( "I like java", 20, 150 );**

7d. Select one of the lines of your program which starts **g.drawRect(10…** try changing the first number to 50 then 100. What do think this number controls?

8. Change your program so the rectangles it draws are twice as wide. How many changes are necessary?

9. Change your program so that the rectangles are located towards the middle of the viewer window. How many changes are necessary?

10. Find the Java API documentation (either locally on your computer or from the internet) and look at the *Graphics* class and the methods called *fillOval* & *drawLine*. Then (using drawLine, drawRect, fillOval, etc) write a new program called "House.java" which draws something like the following...