**Experiment-7**

**Introduction to applet and also display an image by using applet**

**What is Applet?**

An applet is a Java code that must be executed within another program. It mostly executes in a Java-enabled web browser. An applet can be embedded in an HTML document using the tag <APPLET> and can be invoked by any web browser. Parameters can be passed to an applet using the tag <PARAM> in the HTML document. Applets can also be executed using the appletviewer utility provided in the J2SDK kit.

## Life Cycle of an Applet

Four methods in the Applet class gives you the framework on which you build any serious applet −

* **init** − This method is intended for whatever initialization is needed for your applet. It is called after the param tags inside the applet tag have been processed.
* **start** − This method is automatically called after the browser calls the init method. It is also called whenever the user returns to the page containing the applet after having gone off to other pages.
* **stop** − This method is automatically called when the user moves off the page on which the applet sits. It can, therefore, be called repeatedly in the same applet.
* **destroy** − This method is only called when the browser shuts down normally. Because applets are meant to live on an HTML page, you should not normally leave resources behind after a user leaves the page that contains the applet.
* **paint** − Invoked immediately after the start() method, and also any time the applet needs to repaint itself in the browser. The paint() method is actually inherited from the java.awt.

**Features of Applet**

* Speed: Smaller, incremental JRE download and faster applet startup.
* Stability: Applets run in a separate process to the browser, and each applet can optionally run in a separate JVM instance, so one misbehaving applet cannot affect other applets or the browser.
* Configuration: Applets can have parameters passed to them to control behaviour, such as setting a large initial heap size to avoid out of memory exceptions.
* Draggable applets: Applets can now be dragged out of the web browser and run as separate applications.

### Advantage of Applet

There are many advantages of applet. They are as follows:

* It works at client side so less response time.
* Secured
* It can be executed by browsers running under many plateforms, including Linux, Windows, Mac Os etc.

### Disadvantages of Applet

### Plugin is required at client browser to execute applet.

### Applet itself cannot run or modify any application on the local system.

### Applet cannot work with native methods.

* Applets has no access to client-side resources such as files , OS etc.

**Implimentation**

Create a file named [HelloWorld.java](http://journals.ecs.soton.ac.uk/java/tutorial/getStarted/applet/example/HelloWorld.java) with the Java code shown here:

importjava.applet.Applet;

import java.awt.Graphics;

public class HelloWorld extends Applet

{

public void paint(Graphics g)

{

g.drawString("Hello world!", 50, 25);

}

}

If the compilation succeeds, the compiler creates a file named HelloWorld.class in the same directory (folder) as the Java source file (HelloWorld.java). This class file contains Java bytecodes.

Using a text editor, create a file named [Hello.html](http://journals.ecs.soton.ac.uk/java/tutorial/getStarted/applet/example/Hello.html) in the same directory that contains HelloWorld.class. This HTML file should contain the following text:

<HTML>

<HEAD>

<TITLE> A Simple Program </TITLE>

</HEAD>

<BODY>

Here is the output of my program:

<APPLET CODE="HelloWorld.class" WIDTH=150 HEIGHT=25>

</APPLET>

</BODY>

</HTML>

**Output**

enter something like the following into a browser's URL or Location field:

file:/home/kwalrath/HTML/Hello.html

Once you've successfully completed these steps, you should see something like this in the browser window:

