EXPERIMENT 7

PART B

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Date of Experiment:	Date of Submission:
Grade :	

B.1 Software Code written by student:

A.java

```
import java.applet.*;
 import java.awt.*;


public class A extends Applet
 {
        Image img;
                        MediaTracker tr;
                        public void paint(Graphics g)
                        {
                        tr = new MediaTracker(this);
                        img = getImage(getCodeBase(), "card.png");
                        tr.addImage(img,0);
                        g.drawImage(img, 0, 0, this);
      }
 }
```

App.html

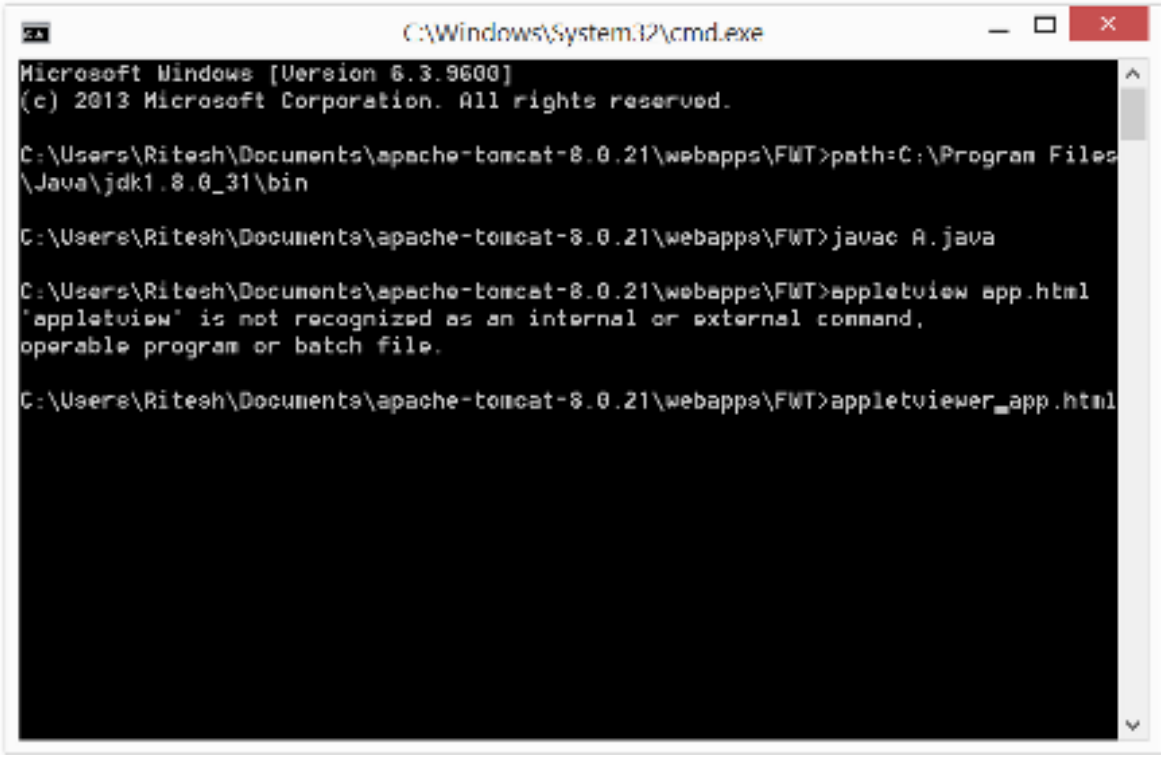
<html>

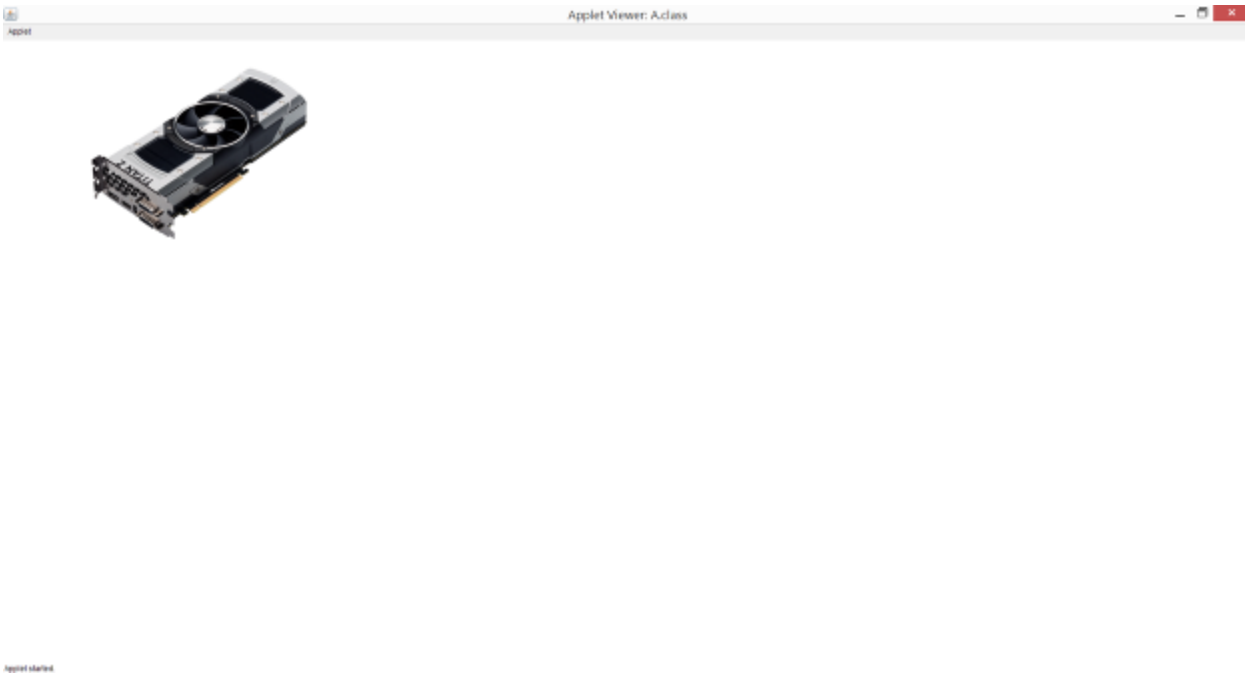
 The Titan Z graphics Card

<applet code="A.class" height="500" width="500"> The Titan Z graphics Card
  One of the gaming beasts </applet>

</html>

B.2 Input and Output:





B.3 Observations and learning:

Applets are used to provide interactive features to web applications that cannot be provided by HTML alone. They can capture mouse input and also have controls like buttons or check boxes. In response to the user action an applet can change the provided graphic content. The applet here displays the image in the HTML page.

B.4 Conclusion:

Thus we have understood and implemented applet in the HTML webpage.

B.5 Question of Curiosity

1) What are applet? Can applets be executed as standalone applications?

Soln:

An applet is a Java program that runs in a Web browser. An applet can be a fully functional Java application because it has the entire Java API at its disposal.

There are some important differences between an applet and a standalone Java application, including the following:

An applet is a Java class that extends the java.applet.Applet class.

A main() method is not invoked on an applet, and an applet class will not define main().

Applets are designed to be embedded within an HTML page.

When a user views an HTML page that contains an applet, the code for the applet is downloaded to the user's machine.

A JVM is required to view an applet. The JVM can be either a plug-in of the Web browser or a separate runtime environment.

The JVM on the user's machine creates an instance of the applet class and invokes various methods during the applet's lifetime.

Applets have strict security rules that are enforced by the Web browser. The security of an applet is often referred to as sandbox security, comparing the applet to a child playing in a sandbox with various rules that must be followed.

Although an applet can run as a standalone application there are subtle differences between how Java runs as and application vs. how it runs as an applet. One starts with an init method, the other starts with a main method, and the threading and event queue relationship to startup are a bit different.

2) Explain the life cycle of an applet?

Soln:

Four methods in the Applet class give 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.