Credit Name: Computer Science 3
Assignment: CRT

Critical Thinking Question

1. **What is GUI?**
   GUI stands for graphical user interface (can be pronounced as gooey), is an application that is written for an operating system.

2. **Explain how code is executed in an event driven application?**
   Event driven is an event driven application that helps to execute code to respond to an event.

3. **Can components be added directly to a frame?**
   Yes, because when components are added to a frame, it gets added to the content pane of the frame which is known as JPanel. In simple words, you are adding components to a panel.

4. **Can a label respond to an event? Explain**
   A label cannot respond to the events directly because it was not designed to be identical to the button. However, you can add event listeners to the components which can then interact with the label. It allows the label to get updated based on the event triggering to other components.

5. **Why do you think a GUI needs to be run from an event-dispatching thread?**
   A GUI needs to run from an event-dispatching thread to help the user's event handlers be executed in a thread safe manner, which helps prevent the conflicts to the user's experience.

6. **What is the difference between a label and a button?**
   Label: graphical component that is used to display text or images that cannot be changed by the user.
   Button: graphical component that the user can click. In other words, it accepts input from the user.