## 1. Display text in VBox

```
package javafxapp5;
import javafx.application.Application;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.layout.StackPane;
import javafx.scene.layout.VBox;
import javafx.scene.text.Text;
import javafx.stage.Stage;
/**
* @author himangsukalita
public class JavaFXApp5 extends Application {
  @Override
  public void start(Stage primaryStage) {
    Text t1=new Text("Hello");
    VBox root = new VBox();
    root.getChildren().add(t1);
    Scene scene = new Scene(root, 300, 250);
    primaryStage.setTitle("First JavaFX App!");
    primaryStage.setScene(scene);
    primaryStage.show();
  }
  public static void main(String[] args) {
    launch(args);
  }
}
```

# 2. Displaying multiple text. Adding multiple nodes together to scene

```
package javafxapp5;
import javafx.application.Application;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.layout.StackPane;
import javafx.scene.layout.VBox;
import javafx.scene.text.Text;
import javafx.stage.Stage;
/**
* @author himangsukalita
public class JavaFXApp5 extends Application {
  @Override
  public void start(Stage primaryStage) {
    Text t1=new Text("Hello");
    Text t2=new Text("Welcome to JavaFX");
    VBox root = new VBox();
    root.getChildren().addAll(t1,t2);
    Scene scene = new Scene(root, 300, 250);
    primaryStage.setTitle("First JavaFX App!");
    primaryStage.setScene(scene);
    primaryStage.show();
  }
  public static void main(String[] args) {
    launch(args);
  }
}
```

### 3. Button with event handler to display text in console

```
package javafxapp5;
import javafx.application.Application;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.layout.StackPane;
import javafx.stage.Stage;
* @author himangsukalita
public class JavaFXApp5 extends Application {
  @Override
  public void start(Stage primaryStage) {
    Button btn = new Button();
    btn.setText("Click");
    btn.setOnAction(new EventHandler<ActionEvent>() {
      @Override
      public void handle(ActionEvent event) {
        System.out.println("Welcome to JavaFX");
      }
    });
    StackPane root = new StackPane();
    root.getChildren().add(btn);
    Scene scene = new Scene(root, 300, 250);
    primaryStage.setTitle("First JavaFX App!");
    primaryStage.setScene(scene);
    primaryStage.show();
  }
  public static void main(String[] args) {
    launch(args);
  }
}
```

### 4. Button with event handler to display text in application

```
package javafxapp5;
import javafx.application.Application;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.geometry.Insets;
import javafx.geometry.Pos;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.layout.StackPane;
import javafx.scene.layout.VBox;
import javafx.scene.text.Text;
import javafx.stage.Stage;
/**
* @author himangsukalita
public class JavaFXApp5 extends Application {
  @Override
  public void start(Stage primaryStage) {
    Button btn = new Button();
    Text t1 = new Text("Button clicked");
    VBox root = new VBox();
    btn.setText("Click");
    btn.setOnAction(new EventHandler<ActionEvent>() {
      @Override
      public void handle(ActionEvent event) {
        root.getChildren().add(t1);
      }
    });
    root.setAlignment(Pos.BASELINE CENTER);
    root.setSpacing(50);
    root.getChildren().add(btn);
    Scene scene = new Scene(root, 300, 250);
    primaryStage.setTitle("First JavaFX App!");
    primaryStage.setScene(scene);
    primaryStage.show();
  public static void main(String[] args) {
    launch(args);
  }
}
```

#### 5. Drawing a circle

```
package javafxapp5;
import javafx.application.Application;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.geometry.Pos;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.layout.StackPane;
import javafx.scene.layout.VBox;
import javafx.scene.paint.Color;
import javafx.scene.shape.Circle;
import javafx.stage.Stage;
/**
* @author himangsukalita
public class JavaFXApp5 extends Application {
  @Override
  public void start(Stage primaryStage) {
    Circle circ2 = new Circle(100, 100, 25); //single line code
    circ2.setFill(Color.BLUEVIOLET);
    Circle circ = new Circle(); //multi line code
    circ.setCenterX(100);
    circ.setCenterY(100);
    circ.setRadius(50);
    circ.setFill(Color.AQUA);
    VBox root = new VBox();
    root.getChildren().add(circ2);
    root.getChildren().add(circ);
    root.setSpacing(20);
    root.setAlignment(Pos.CENTER);
    Scene scene = new Scene(root, 300, 250);
    primaryStage.setTitle("First JavaFX App!");
    primaryStage.setScene(scene);
    primaryStage.show();
  }
  public static void main(String[] args) {
    launch(args);
  }
}
```

#### 6. Checkbox with event handler

```
package javafxapp5;
import javafx.application.Application;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.geometry.Pos;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.control.CheckBox;
import javafx.scene.layout.StackPane;
import javafx.scene.layout.VBox;
import javafx.scene.paint.Color;
import javafx.scene.shape.Circle;
import javafx.scene.text.Text;
import javafx.stage.Stage;
* @author himangsukalita
public class JavaFXApp5 extends Application {
  @Override
  public void start(Stage primaryStage) {
    Text t1 = new Text("Learning JavaFX?");
    Text t2 = new Text("");
    CheckBox chk = new CheckBox("yes");
    boolean isYes = chk.isSelected();
       chk.setOnAction(new EventHandler<ActionEvent>() {
      @Override
      public void handle(ActionEvent event) {
         if(chk.isSelected()){
           t2.setText("Awesome");
        }
    });
    VBox root = new VBox();
    root.getChildren().add(t1);
    root.getChildren().add(t2);
    root.getChildren().add(chk);
    root.setSpacing(20);
    root.setAlignment(Pos.CENTER);
    Scene scene = new Scene(root, 300, 250);
    primaryStage.setTitle("First JavaFX App!");
    primaryStage.setScene(scene);
    primaryStage.show();
   public static void main(String[] args) {
    launch(args);
  }
}
```

### 7. Webview example

```
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
*/
package javafxapplication6;
import javafx.application.Application;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.layout.StackPane;
import javafx.scene.web.WebView;
import javafx.stage.Stage;
* @author himangsukalita
public class JavaFXApplication6 extends Application {
  @Override
  public void start(Stage primaryStage) {
    Button btn = new Button();
    WebView webview = new WebView();
    webview.getEngine().load("https://vitap.ac.in");
    StackPane root = new StackPane();
    root.getChildren().add(webview);
    Scene scene = new Scene(root, 1100, 750);
    primaryStage.setTitle("Hello World!");
    primaryStage.setScene(scene);
    primaryStage.show();
  }
  * @param args the command line arguments
  public static void main(String[] args) {
    launch(args);
  }
}
```

#### 8. Simple number guessing game

```
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
*/
package javafxapp1;
import java.awt.event.ActionEvent;
import javafx.application.Application;
import javafx.event.EventHandler;
import javafx.geometry.Pos;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.control.TextField;
import javafx.scene.layout.HBox;
import javafx.scene.layout.StackPane;
import javafx.scene.layout.VBox;
import javafx.scene.paint.Color;
import javafx.scene.text.Text;
import javafx.stage.Stage;
* @author himangsukalita
public class JavaFXApp1 extends Application {
  @Override
  public void start(Stage primaryStage) throws Exception {
    Text tx = new Text("Enter a number between 1 and 100");
    TextField input = new TextField();
    Text msg = new Text();
    msg.setStyle("-fx-font: 15 arial;");
    input.setMaxWidth(70);
    Button btn = new Button();
    btn.setText("Enter");
    int min = 1;
    int max = 100;
    int rnd = (int) (Math.random() * (max - min + 1) + min);
    VBox vb = new VBox();
    btn.setOnAction(new EventHandler<javafx.event.ActionEvent>() {
      @Override
      public void handle(javafx.event.ActionEvent event) {
        int inpt = Integer.valueOf(input.getText());
        int diff = inpt - rnd;
         msg.setStroke(Color.RED);
        if (inpt == rnd) {
```

```
msg.setStroke(Color.AQUAMARINE);
         msg.setText("Congrats You WON!!");
       } else if (diff > 50) {
         msg.setText("Ooops! Too high. Try a bit low");
       } else if (diff < -50) {
         msg.setText("Ooops! Too Low. Try a bit high");
       } else if (diff > 20 && diff <= 50) {
         msg.setText("Ooops! Little bit high. Try a bit low");
       } else if (diff < -20 && diff >= -50) {
         msg.setText("Ooops! Little bit low. Try a bit high");
       } else if (diff > 10 && diff <= 20) {
         msg.setText("Ooops! Almost there. Try a bit low");
       } else if (diff < -10 && diff >= -20) {
         msg.setText("Ooops! Almost there. Try a bit high");
       } else if (diff >= 1 && diff <= 10) {
         msg.setText("Ooops! You Almost got it. Try a little bit low");
       } else if (diff <= -1 && diff >= -10) {
         msg.setText("Ooops! You Almost got it . Try a little bit high");
      }
    }
  });
  vb.getChildren().add(msg);
  vb.getChildren().add(tx);
  vb.getChildren().add(input);
  vb.getChildren().add(btn);
  vb.setAlignment(Pos.CENTER);
  vb.setSpacing(20);
  Scene sc = new Scene(vb, 300, 200);
  primaryStage.setScene(sc);
  primaryStage.show();
}
* @param args the command line arguments
public static void main(String[] args) {
  launch(args);
}
```