Løsningsforslag – Uke 15

1.

```java
import javafx.application.Application;
import javafx.stage.Stage;
import javafx.scene.Scene;
import javafx.scene.layout.VBox;
import javafx.scene.control.Button;
import javafx.scene.control.Label;
import javafx.scene.control.TextField;
import javafx.event.EventHandler;
import javafx.event.ActionEvent;
import javafx.geometry.Pos;

public class Oppgave1 extends Application{
  public TextField tekstfelt;
  public Label hilsen;

  @Override
  public void start(Stage stage){
    VBox pane = new VBox();
    pane.setAlignment(Pos.CENTER);

    Label merkelapp = new Label("Fyll inn navn:");
    tekstfelt = new TextField("Navn");

    Button knapp = new Button("Si hei!");
    Behandler behandler = new Behandler();
    knapp.setOnAction(behandler);

    hilsen = new Label("");

    pane.getChildren().addAll(merkelapp, tekstfelt, knapp, hilsen);
    stage.setScene(new Scene(pane, 200, 100));
    stage.show();
  }


  class Behandler implements EventHandler<ActionEvent>{
    @Override
    public void handle(ActionEvent e){
      String hilsetekst = tekstfelt.getText();
      hilsen.setText(String.format("Hei på deg, %s!", hilsetekst));
    }

  }

  public static void main(String[] args) {
    launch(args);
  }
}
```

2.

```java
import javafx.application.Application;
import javafx.stage.Stage;
import javafx.scene.Scene;
import javafx.scene.layout.VBox;
import javafx.scene.layout.HBox;
import javafx.scene.control.Button;
import javafx.scene.control.TextField;
import javafx.event.EventHandler;
import javafx.event.ActionEvent;
import javafx.geometry.Pos;

public class Kalkulator extends Application {

        /*Trenger aa kunne hente ut disse i ButtonHandler*/
        HBox textPane;
        TextField t1, t2;
        HBox buttonPane;
        TextField res;

        @Override
        public void start (Stage stage) {
                VBox rootPane = new VBox();

                textPane = new HBox();
                textPane.setAlignment(Pos.CENTER);

                t1 = new TextField("Number 1");
                t2 = new TextField("Number 2");

                textPane.getChildren().addAll(t1, t2);

                buttonPane = new HBox();
                buttonPane.setAlignment(Pos.CENTER);

                Button plusB = new Button("+");
                Button minusB = new Button("-");
                Button multB = new Button("X");
                Button divB = new Button ("/");

                buttonPane.getChildren().addAll(plusB, minusB, multB, divB);

                ButtonHandler btnH = new ButtonHandler();

                plusB.setOnAction(btnH);
                minusB.setOnAction(btnH);
                multB.setOnAction(btnH);
                divB.setOnAction(btnH);

                res = new TextField("Result");

                rootPane.getChildren().addAll(textPane, buttonPane, res);
                stage.setScene(new Scene(rootPane, 200, 100));
                stage.setTitle("My Calculator");
```

```java
                    stage.show();
        }

        public static void main(String[] args) {
                launch (args);
        }

        class ButtonHandler implements EventHandler<ActionEvent>{

                @Override public void handle (ActionEvent e) {

                        /*Finner ut hvilken knapp som har vært trykket*/
                        Button tmp = (Button) e.getSource();

                        Double num1 = 0.0, num2 = 0.0;

                        try {
                                num1 = Double.parseDouble(t1.getText());
                                num2 = Double.parseDouble(t2.getText());

                        } catch (NumberFormatException nfe) {
                                System.out.println("Those aren't numbers!");
                                return;
                        }

                        String op = tmp.getText();

                double r = 0;

                switch (op){
                    case "+":
                        r = num1+num2;
                        break;

                    case "-":
                        r = num1-num2;
                        break;

                    case "X":
                        r = num1*num2;
                        break;

                    case "/":
                        r = num1/num2;
                        break;

                }
                res.setText(""+r);
                }
        }
}
```