
Write you own programs

COMP 102

Victoria University of Wellington

Writing your own programs

How?

- Use other programs as models, and then modify
 - Very useful strategy
 - Lectures have examples that you can use as models for your assignment programs

A new program

- Calculator to convert baking recipes
 - convert ounces to grams
 - convert tbsp to ml

A new program

- Calculator to
 - convert ounces to grams
 - convert tbsp to ml

```
import ecs100.*;  
/** Program to convert baking measures */
```

```
public class TemperatureCalculator{  
    public void doFahrenheitToCelsius(){  
        double fahrenheit = UI.askDouble("Fahrenheit:");  
        double celsius = (fahrenheit - 32.0) * 5.0 / 9.0;  
        UI.println(fahrenheit + " F -> " + celsius + " C");  
    }  
}
```

A new program

- Calculator to
 - convert ounces to grams
 - convert tbsp to ml

```
import ecs100.*;
/** Program to convert baking measures */
public class BakingMeasureCalculator{

    public void doOuncesToGrams(){
        double ounces = UI.askDouble("Ounces:");
        double grams = ounces * 28.3495;
        UI.println(ounces + " oz -> " + grams + " gr");
    }
}
```

```
public class TemperatureCalculator{

    public void doFahrenheitToCelsius(){
        double fahrenheit = UI.askDouble("Fahrenheit:");
        double celsius = (fahrenheit - 32.0) * 5.0 / 9.0;
        UI.println(fahrenheit + " F -> " + celsius + " C");
    }
}
```

Writing your own programs

How?

- Use other programs as models, and then modify
 - Very useful strategy

BUT

- It can be hard to work out how to modify

Need to understand the language

- ⇒ vocabulary
- ⇒ syntax rules
- ⇒ meaning (“semantics”)