# **COSC1284**

**Programming Techniques** 

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What's next...

### **Outline**



- Announcements
- Assignment in Focus
- Feedback: Your questions answered
- Code Examples (Sumarise Concepts)





### **Announcements**



### **Assignment 1**

- Due this week Friday 21<sup>st</sup> August (11:59 p.m.)
- Read and completed all the exercises in your textbook from Chapters 6.
- Completed your latest in-progress submission for your assignment.
- Are up to date with any discussion posts.
- Are making use of the discussion forum to get any of your programming doubts cleared up.
- If you need assistance outside of the discussion forum please e-mail me to make a time to discuss.



### "Clarification on D1 in the assignment specification"

- You can ignore the first sentence that begins with Evaluate . . . This is covered in D2
- "Evaluates strategies used to meet requirements and compares the quality of one approach to another approach."

### "Using printf to display decimal places"

System.out.printf("Four thirds = %.3f", 4.0 / 3.0);

output: Four thirds = 1.333



### "Handling invalid data type inputs"

- It is good programming practice to handle these situations.
- You ask the user for numeric input but they instead enter text i.e. 'two' and not 2
- You try to assign the value to a variable that holds a double or integer type.
- You cannot stop the user from entering 'two' at least not easily or wisely.
- The textbook shows you how to do this (Chapter 5 & 6)
- However, it is not a requirement of the assignment that you implement this.

#### "Redundant conditions"

Conditions that will never be executed.



### "Lotto Checker – Out of range"

 You should do the range checking first and only perform the steps of your algorithm, if valid values have been provided.

#### "Use of constants"

- Constants help readability.
- Constants are part of your algorithmic logic.
- Constants give compile time safety.
- Often when reading code we are "tired" and/or dealing with complex logic.
  Don't make your job or the job of others harder than it has to be.
- Constants are good ©



#### "Generating Random Numbers"

- Yes you can use the Random class if you wish
- Chapter 3 of your textbook.

#### "Use of constants"

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- Constants are part of your algorithmic logic.
- Constants give compile time safety.
- Often when ready code we are "tired" and/or dealing with complex logic.
  Don't make your job or the job of others harder than it has to be.
- Constants are good ③

# **Assignment in Focus**



### Chapters 1 - 6

- Lectures, Tutorials, Textbook, Research
  - Everything you need to be able to complete the assignment
- Assignment 2 specification
  - Released as soon as it is approved. Hopefully next week ©
- Main Chapters for Assignment 2
  - 6, 7, 9, and 10







# **Chapter 6 – Loops & Strings**



- while
- do while
- for
- nesting
- Strings
- characters
- iteration
- indexOf
- charAt
- substring

- string comparison
- string formatting
- increment
- decrement
- infinite loop

## **Code example**



Writing simple programs with best practice code.