

# CSE 11

# Accelerated Intro to Programming

## Lecture 17

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This lecture is being recorded

# Announcements

→ Based on PA7 ✓ 90%

- PA9 due Thursday @ 11:59pm
  - No resubmission
- PA6, PA7, PA8 resubmission due Friday @ 11:59pm
  - No tutor hours available on Friday
- Final Exam
  - Friday – releasing at 12am
    - Due Saturday @ 4:00pm

# Datatypes

- Whole numbers
  - int – 32 bit
  - long – 64 bit
  - short – 16 bit
- Floating point numbers
  - float – 32 bit
  - double – 64 bit
- boolean
- char
- byte

Equality

# Equality

- ==
- checkExpect( \_\_\_\_\_ , \_\_\_\_\_ )
- .equals( \_\_\_\_\_ )

# More Equality

- `Arrays.equals( ____ )`

# instanceof

- <name> instanceof <type>
  - Where <type> could be a class or interface
- What instanceof does
  - is it takes a value and a class and it checks if that values class is below the given class in the class hierarchy
    - returns true if it is
    - returns false if it's not

# Casting

```
class A {}
```

```
class C extends A {}
```

```
A aValue = new C();
```

```
C cValue = (C) aValue;
```



# toString()

- It's often useful for us to define our own toString method on classes that we make if we want to be able to see their output
- The default toString isn't really helpful as it only shows the name of the class with the reference in it
- It's usually really helpful to be able to print out the contents of a class

# Access Modifiers

- public
- <no modifier>
  - default
- private
- protected