

CSE 11

Accelerated Intro to Programming

Discussion Section 9

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This discussion is being recorded

Logistics

- PA8 due today at 11:59PM
- PA9 released – due next Thursday
- Exam2
 - Thursday 9pm – Sunday 11:59pm

Exceptions

- Checked exceptions
 - Must be handled in some way (try/catch, throws clause)
 - Example: IOException

```
Class FileHelper {  
    static String[] getLines(String path) {  
        try {  
            return Files.readAllLines(Paths.get(path)).toArray(String[]::new);  
        }  
        catch(IOException e) {  
            System.err.println("Error reading file");  
            return new String[]{"Error reading file"};  
        }  
    }  
}
```

Exceptions

- Unchecked exceptions
 - Do not have to be handled
 - ArithmeticException
 - IndexOutOfBoundsException
 - IllegalArgumentException
 - NullPointerException
 - ...

Primitive types

- int, long, short, double, float, boolean, char, byte
 - Limited range and/or limited precision
 - Can use == to check for equality

```
int a = 1;
```

```
int b = 1;
```

```
boolean c = a == b; // true
```

Non-primitive types

- String, Point, TextTweet, ImageQuery, Array, ArrayList

- == does not work as expected

```
String a = "hello";  
String b = "hhello".substring(1);  
boolean c = a == b; // ???
```

- Instead, use equals method to check equality

```
String a = "hello";  
String b = "hhello".substring(1);  
boolean c = a.equals(b); // ???
```

- Special case: Arrays

```
int[] a = {1, 2, 3};  
int[] b = {1, 2, 3};  
boolean c = a.equals(b); // ???  
boolean d = Arrays.equals(a, b); // ???
```

Exam2

- Similar to Exam1 (programming + video)
- Cumulative
- Start early
- Read instructions carefully
- Follow instructions closely

PA9

Thanks!