



Primary Programming Essentials Lesson 7

Attila Lengyel

Peter Walker

Victor Vong

Eric O'Riley

Thomas Baker



Compounding Comparisons



Comparisons

- We learned about the different kinds of comparisons. (We used them in our IF statements)
 - What are some examples?
- What if you wanted to compare multiple things at once?
 - *homework* is “done” AND *computer* is “working”
 - Play some Minecraft
 - *time* is “morning” OR time is “evening”
 - Time to watch Cartoons



Comparison

- Java has an AND and OR operator that will join comparisons

AND → **& &**

OR → **| |**



Comparisons

- We can use these in anything that needs to evaluate to **true** or **false**

```
int x = 10;
```

```
int y = 100;
```

```
if (x < 50 && y > 50) {
```

```
    System.out.println("That evaluated to true");
```

```
}
```

```
else {
```

```
    System.out.println("That was false");
```

```
}
```



More Repetition



Repetition

- We covered **for loops**
 - Do X a number of times
- Now we're going to introduce **while loops**
- Any guesses how it's different?





Repetition

- **While loops:** Doing something over indefinitely until a condition is met



- **What are some other examples?**



Repetition

- The **for loop**

```
for (start; comparison; step) {  
    // do something  
}
```



Repetition

- The **while loop**

```
start;
```

```
while(comparison) {
```

```
    // do something
```

```
    step;
```

```
}
```



User Input

Programming Activity!!

Let's make the computer count from 1 to 10....again!!



User Input

END