

# Lecture 3.3 – Conditionals

## Specific Learning Objectives:

**1.2.1 – Understand the way computers execute commands.**

**1.2.7 – Understand and successfully execute conditional if/else statements (vectorized and non-vectorized).**

**3.5 – Think and work independently with code.**

# Check Your Understanding

**Write a conditional that prints “higher” if the number *n* is above 10 *and* “lower” if the number *n* is below 10.**

**Try adding a second condition statement to test so that the number *j* is also tested. Now make “higher” print if *j and n* are above 10 and lower if *j and n* are below 10.**

# Check Your Understanding

**Write a conditional that prints “higher” if the number `n` is above 10 and “lower” if the number `n` is below 10.**

**Add two other conditions that prints “a lot lower” if `n` is below 0 and “a lot higher” if `n` is above 20.**

**(Try this using `if` and `else`, and then with `switch`!)**

# In Class Exercises

1. **Work with a partner:** For the following code:

```
cond <- c(TRUE, FALSE, FALSE, NA, TRUE)
answers <- ifelse(is.na(cond), "blob",
                  ifelse(cond, "heads", "tails"))
```

What will the value of each place in answers? Write this down before you run the code. Check with your neighbor, then run the code.

2. **Work on Assignment 3.3.**

# Action Items

- 1. Complete Assignment 3.3.**
- 2. Read Davies Ch. 10.2 for next time.**