**Part 1: Make a Grilled Cheese**

With a partner, write a set of steps to make a grilled cheese sandwich.

**Part 2: Tell a Computer to Make Grilled Cheese**

To tell the computer how to make a grilled cheese we will need to be able to read and write code. Below are functions needed to code how to create a grilled cheese sandwich with multiple types of bread, cheese, and various cook times.

|  |  |  |  |
| --- | --- | --- | --- |
|  | butter\_bread() | add\_cheese() | fry\_sandwich() |
| **Description** | This function is used to get the sandwich started by buttering the bread | This function is used to add cheese to the sandwich | This function is used to fry the sandwich. Let’s assume that this function also puts the pieces of bread together to make the sandwich and prepares everything needed to fry the sandwich. |
| **Arguments** | type  Options   * “sourdough” * “wheat” * “white” | flavor  Options   * “cheddar” * “american” * “pepperjack” * “colby” | time  Options  A numeric value (number) indicating the cooking time, in minutes |
| **Example** | butter\_bread(type = “sourdough”) | add\_cheese(flavor = “cheddar”) | fry\_sandwich(time = 5) |

**Reading Code**

Read this code aloud and write out what the entire set of code does. When you read the “+”, say “and then”:

butter\_bread(type = “sourdough”) +

add\_cheese(flavor = “cheddar”) +

fry\_sandwich(time = 5)

**Your Turn: Reading Code**

1. What does this code chunk do?

butter\_bread(type = “white”) +

add\_cheese(flavor = “american”) +

fry\_sandwich(time = 3)

1. What does this code chunk do?

butter\_bread(type = “wheat”)+

fry\_sandwich(time = 6)+

add\_cheese(flavor = “pepperjack”)

**Your Turn: De-bugging**

1. Find 3 bugs in the following code chunk and correct them.

butterbread(type = “wheat”) +

add\_cheese(flavor = “Colby”) +

fry\_sandwich(time = “6”)

1. Find 2 bugs in the following code chunk and correct them.

butter\_breadtype = “white” +

add\_cheese(flavor = “cheddar”)

fry\_sandwich(time = 6)

**Your Turn: Writing Code**

1. Write the code to create the following sandwich:

*A sourdough grilled cheese sandwich with American Cheese, fried for 5 minutes.*

1. Write the code to create the following sandwich:

*A wheat grilled cheese sandwich with cheddar cheese, fried for 3 minutes.*

*Once you are done with Questions 5 and 6, swap your code with a group next to you and check for errors/”bugs”.*