Estimated work: 30-60 minutes

THE MISSION

Part 1: Are You Broke?

You are going to build a simple calculator to determine if you can purchase an item at a store. You are at the checkout line and you swipe your credit card–will it be accepted or rejected? Let's find out!

- Create a variable called balance and put an Integer value into it
- Create a second variable called itemPrice and put an integer value into it
- Write comparison logic to see if you can purchase the item
  - If true, print "Purchasing [Item name] for $X" where X is the price of the item. Then print "New balance is $N" where N is the updated balance after the purchase
  - If False (cannot purchase) print, "You are broke and cannot afford this item. You need an additional $X to buy it!" where X is the difference you need to come up with
- Try 10 different number combinations for both variables and see what results you get

Post a screenshot of your final code to the #missions channel

Skill Level: **Easy**

DAY 5

One of the foundations of programming is to being able to compare things in order to perform logic. Today is all about if and else statements–to be or not to be.

THE MISSION

Part 2: Kilopounds

Create an algorithm (code) that converts kilograms to pounds.

The formula is: Pounds = Kilograms * 2.205

Advanced: Circles (Optional)

Given r for radius, write an algorithm to determine the area of a circle. Solve for the following values:

- **r15**
- **r128**
- **r7**
- **r6**

Compare your results with an online radius calculator.

— **Post a screenshot of your final code to the #missions channel**

Skill Level: **Easy**

DAY 5

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