What the Hack: Variables | Episode 2 Challenges

Ready to test your knowledge? Turn your brain fans on to maximum speed with these challenges!

Challenge 1: Type Checking and Casting
Let us take a look at each type of variable that we have and try converting (aka casting) each one to a different type.

```
a = "Hello"
b = 100
c = "100"
d = 101.234
```

Check the type of the variables above.

- Can you convert variable `a` to type float or type integer?
- Can you convert variable `b` to type float or type string?
- Can you convert variable `c` to type float or type integer?
- Can you convert variable `d` to type integer or type string?

Challenge 2: Asking for Input and Printing the Input
Let us interact with the person that is using our program! We will have the program ask the person their name and respond back saying “Hello” along with the person’s name.

Use the input() function to ask for a name, and then print out “Hello” and the person’s name.

Challenge 3: Make Your Own Small Calculator
Lastly, we will make a program in Python to help us do simple calculations. We will ask whoever is using the program to pick a number (dividend) and we will code the program to show the result (quotient) and what is left over (remainder) when divided by 2 (divisor).

*Look below for a reminder of what a dividend, divisor, quotient, and remainder are!*

```
2
+---+
|   |
|   |
|   |
```

```
Use the input() function to ask for a number and print the quotient and the remainder of your number when divided by 2.