**Exercises: More on Functions (Part 2)**

Shiver me timbers! Ye did well. Yer ready ta join a boarding party.

**Raid Yonder Shuttle**

Ye may still be wonderin’ *Why the blazes would I ever use an anonymous function?* Fer today’s mission, o’ course! We arrrr going to loot yonder shuttle, but since it’s the 21st century, we need to do better than grappling hooks and rope.

Ye arrrr going to hack into the shuttle code and steal supplies. Since the LaunchCode TAs keep a sharp eye on the goodies, ye can’t just add new functions like siphonFuel or lootCargo. Ye need to be more sneaky.

Clever.

Invisible.

*Anonymous*.

The first mate swiped a copy of the code ye need ta hack. Ye'll see it in the editor.

**First, steal some fuel from the shuttle.**

1. Define an anonymous function and set it equal ter a variable with the normal, non-suspicious name of parrotFood. The function needs one parameter, which will be the fuel level on the shuttle.
2. Ye must siphon off fuel without alerting the TAs. Inside yer function, ye want to reduce the fuel level as much as possible WITHOUT changing the color returned by the checkFuel function.
3. Once ye figure out how much fuel ter pump out, return that value.
4. Be sure to test yer function! Those bilge rat TAs will notice if they lose too much fuel.

**Next, liberate some of that glorious cargo.**

1. Define another anonymous function with an array as a parametarrrrr, and set it equal to another innocent variable, deckMops.
2. Ye need to swipe two items from the cargo hold. Choose well. Stealing water ain’t gonna get us rich. Look fer smaller tech or valuable items that we kin sell like ['dilithium', 'gold', 'AE-35 unit', 'Legos', 'TI-89 calculator'].
3. Put the swag into a new array and return it from the function.
4. The cargo hold has better security than the fuel tanks. It counts how many things are in storage. Ye need to replace what ye steal with something worthless. The count MUST stay the same, or ye’ll get caught and thrown into the LaunchCode brig.
5. Don’t get hasty, swabbie! Remember to test yer function.

**Finally, ye need to print a receipt for the accountant.**

Don’t laugh! That genius knows MATH and saves us more gold than ye can imagine.

Define a function called irs that takes fuelLevel and cargoHold as parametarrrrrs.

1. Call parrotFood and deckMops from within irs.
2. Use a template literal to return, "Raided \_\_\_\_\_ kg of fuel from the tanks, and stole \_\_\_\_ and \_\_\_\_ from the cargo hold."

**Before Ye Submit:**

Ye must assign the correct function and variable names fer the auto-grader to work.

function checkFuel(level) {

if (level > 100000){

return 'green';

} else if (level > 50000){

return 'yellow';

} else {

return 'red';

}

}

function holdStatus(arr){

if (arr.length < 7) {

return `Spaces available: ${7-arr.length}.`;

} else if (arr.length > 7){

return `Over capacity by ${arr.length-7} items.`;

} else {

return "Full";

}

}

let parrotFood = function(m){

while (checkFuel(m) === 'green'){

m = m - 1;

checkFuel(m);

}

return m;

};

let deckMops = function(n){

arrayLengthStart = cargoHold.length;

if (swagToSteal.includes(n) === true){

cargoHold.splice(cargoHold.indexOf(n), 1);

cargoHold.push("coal");

return n;

}

};

let irs = function(fuelLevel, cargoHold){

newValue = parrotFood(fuelLevel);

theftArray = cargoHold.map(deckMops);

for (i=0; i<(theftArray.length); i++){

theftArray.shift();

}

// console.log(theftArray);

}

// \*\*\*\*\*\*\*\*Functions are all above this line\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

let fuelLevel = 200000;

let cargoHold = ['meal kits', 'space suits', 'first-aid kit', 'satellite', 'gold', 'water', 'AE-35 unit'];

let swagToSteal = ['dilithium', 'gold', 'AE-35 unit', 'Legos', 'TI-89 calculator'];

let newValue = 0;

let theftArray = [];

irs(fuelLevel, cargoHold);

fuelTaken = fuelLevel - newValue;

console.log(`Raided ${fuelTaken}kg of fuel from the tanks, and stole ${theftArray[0]} and ${theftArray[1]} from the cargo hold.`);