020 TypeScript - IIFE

TypeScript Kata List – Blog Page

[TypeScript Kata List on GitHub](https://github.com/robertdunaway/katas-typescript)

# Duration

5 minutes

# Brief

Wrapping functions with IIFE to protect the global namespace.

### For More Information

BING/GOOGLE: “TypeScript IIFE”

# Instructions

Get tutorial folder or the entire katas-typescript repo.

Open the [before/\*.sln] file and execute the kata.

Feel free to execute this kata multiple times because repetition creates motor memory.

# Github

* Before (start kata with this)
  + https://github.com/robertdunaway/katas-typescript/tree/master/020%20TypeScript%20-%20IIFE/before
* After
  + https://github.com/robertdunaway/katas-typescript/tree/master/020%20TypeScript%20-%20IIFE/after

# Kata

Apply the IIFE design pattern to each function. Use the dashes to indicate the boundaries of the IIFE.

[highlight below for one possible answer]

(function () {

// Wrap this simple function in IIFE

function add(a: number, b: number): number {

return a + b;

}

console.log('5 + 2 = ' + add(5, 2));

})();

// add is not recognized here.

//console.log('5 + 2 = ' + add(5, 2));

(function () {

// Wrap this function in IIFE

var add2 = function (a: number, b: number): number {

return a + b;

}

console.log('anonymous function');

console.log('5 + 5 = ' + add2(5, 5));

})();

(function () {

// Wrap this function in IIFE

var add3 = (a: number, b: number): number => {

return a + b;

}

console.log('arrow function');

console.log('10 + 5 = ' + add3(10, 5));

})();

(function () {

// Wrap this function in IIFE

var profile = function (fName: string, lName: string, age?: number

, height?: number, weight?: number): string {

// String interpolation

console.log(`name: ${fName} ${lName} age: ${age} height: ${height} weight: ${weight}`);

return '';

}

console.log('all parameters are required');

profile('John', 'Smith', 35, 180, 165);

})();

(function () {

// Wrap this function in IIFE

var profileWithOptions = function (fName: string, lName: string, age?: number

, height?: number, weight?: number): string {

// String interpolation

console.log(`name: ${fName} ${lName} age: ${age} height: ${height} weight: ${weight}`);

return '';

}

console.log('example of optional parameters');

profileWithOptions('John', 'Smith');

})();

(function () {

// Wrap this function in IIFE

var profileWithDefaults = function (fName: string, lName: string, age: number = 18

, height: number = 150, weight: number = 100): string {

// String interpolation

console.log(`name: ${fName} ${lName} age: ${age} height: ${height} weight: ${weight}`);

return '';

}

console.log('example of default parameters');

profileWithDefaults('John', 'Smith');

})();

(function () {

// Wrap this function in IIFE

for (var index: number = 0; index < 10; index++) {

console.log(index);

}

})();

(function () {

// Wrap this function in IIFE

var myNumber: number = 5;

for (var multiplier = 1; multiplier <= 10; multiplier++) {

var result = myNumber \* multiplier;

console.log(`${myNumber} \* ${multiplier} = ${result}`);

}

})();

# Next

Take a few minutes and imagine more examples.