

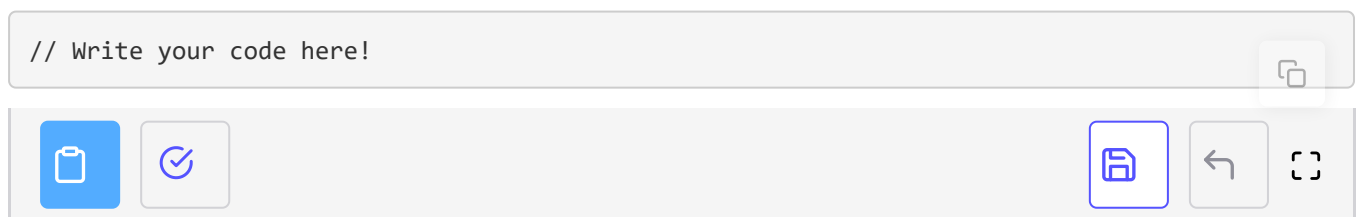
Exercise on Arrow Functions

You will be writing and modifying function declarations using the arrow syntax.

Exercise 1:

Write an arrow function that returns the string `'Hello World!'`.

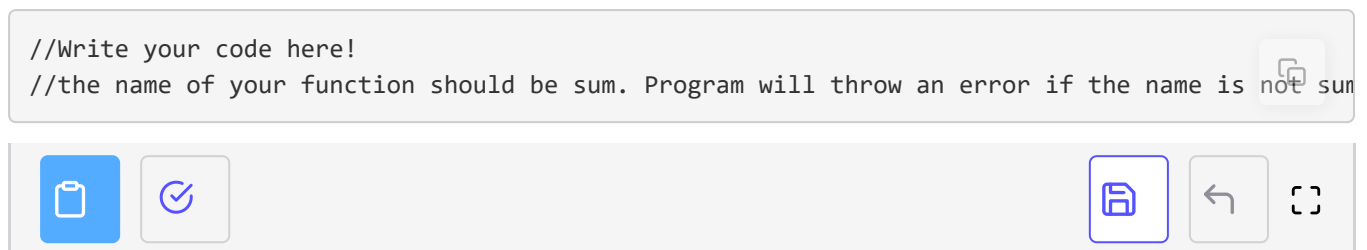
```
// Write your code here!
```



Exercise 2:

Write an arrow function that expects an array of integers, and returns the sum of the elements of the array. Use the built-in method `reduce` on the array argument.

```
//Write your code here!  
//the name of your function should be sum. Program will throw an error if the name is not sum
```



Explanation:

Reduce works with an accumulator to store the value associated with reducing the array, and takes two arguments:

- the initial value of the accumulator,
- a function to define the operation between the accumulator and the upcoming element of the array. Reduce performs the following operations:
- `(0,1)=>0+1` becomes 1,
- `(1,2)=>1+2` becomes 3,
- `(3,3)=>3+3` becomes 6,

- $(6,4) \Rightarrow 6+4$ becomes 10,
- $(10,5) \Rightarrow 10+5$ becomes 15.

Exercise 3:

Rewrite the following code by using arrow functions wherever it makes sense to use them:

```
var Entity = function( name, delay ) {  
  this.name = name;  
  this.delay = delay;  
};  
Entity.prototype.greet = function() {  
  setTimeout(function() {  
    console.log( 'Hi, I am ' + this.name );  
  }.bind( this ), this.delay );  
};  
  
var java = new Entity( 'Java', 5000 );  
var cpp = new Entity( 'C++', 30 );  
java.greet();  
cpp.greet();
```



Explanation:

- It does not make sense to replace the Entity constructor, because we need the context.
- It does not make sense to replace the prototype extension greet, as we make use of its default context.
- It makes perfect sense to replace the function argument of setTimeout with an arrow function. Notice that the context binding also disappeared in the solution.