

1. Write a function that would allow you to do this.

```
var addSix = createBase(6);  
addSix(10); // returns 16  
addSix(21); // returns 27
```

Ans. function createBase(num)

```
{  
  
  return function add(num2)  
  {  
    return(num+num2);  
  }  
  
}  
var addSix = createBase(6);  
console.log(addSix(10)); // returns 16  
console.log(addSix(21)); // returns 27
```

2. Write a function (doLaundry) that would give the following output.  
**Expected Output:** wash dry fold done!

Ans. function wash(callback) {

```
  setTimeout(function() {  
    console.log('wash');  
    callback();  
  }, 500);  
}
```

```
function dry(callback) {  
  setTimeout(function() {  
    console.log('dry');  
    callback();  
  }, 300);  
}
```

```
function fold(callback) {  
  setTimeout(function() {  
    console.log('fold');  
    callback();  
  }, 100);  
}
```

```
doLaundry([wash, dry, fold]);  
function wash(callback) {  
  setTimeout(function() {  
    console.log('wash');
```

```

        callback[0](callback.slice(1));
        //callback();
    }, 500);
}

function dry(callback) {
    setTimeout(function() {
        console.log('dry');
        callback[0](done);
        //callback();
    }, 300);
}

function fold(callback) {
    setTimeout(function() {
        console.log('fold');
        callback();
        //callback();
    }, 100);
}

function done() {
    console.log('done');
}

function doLaundry(array){
    array[0](array.slice(1))
}
doLaundry([wash, dry, fold]);

```

3. Create an object “updatedData” using the “originalData” provided below by changing the name and the city part only, and print both in the console. Note: The originalData must not be changed.

```

const originalData = {
  id: 1,
  name: 'John',
  age: 30,
  address: {
    city: 'New York',
    street: '123 Main St',
    zip: '10001',
  },
};

```

```
// Update the 'name' and 'city' property in the 'address' object
const updatedData = {
};
```

```
console.log(originalData);
console.log(updatedData);
```

Ans. const originalData = {  
 id: 1,  
 name: 'John',  
 age: 30,  
 address: {  
 city: 'New York',  
 street: '123 Main St',  
 zip: '10001',  
 },  
};

```
// Update the 'name' and 'city' property in the 'address' object
const updatedData =
{...originalData,name:"Daniel",address:{...originalData.address,city:"Canada"}};
updatedData["name"] ="Daniel";
console.log(originalData);
console.log(updatedData);
```

4. Predict the output of the following.

Modify the print function to log 1 after 1 second, 2 after 2 second etc. into the console.

Ans. 

```
function print() {
  for (var i = 1; i <= 5; i++) {
    setTimeout(() => console.log(i), i * 1000)
  }
}
```

```
print();
```

Ans. 

```
function print() {
  for (let i = 1; i <= 5; i++) {
    setTimeout(() => console.log(i), i * 1000)

  }
}
```

```
print();
```

5. Design an HTML page showing the time in a heading (use Date.now() ), and a button 'update' which updates the time when clicked

Ans. `<!DOCTYPE html>`

```

<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <h4>
  </h4>
  <button onclick="updateTime()">Update</button>
</body>
<script>
  let element = document.getElementsByTagName("h4")[0];
  let date = Date.now();
  let fdate = new Date(date);
  element.innerHTML = fdate;
  function updateTime(){
    let date1 = Date.now();
    let fdate1 = new Date(date1);
    element.innerHTML = fdate1;
  }
</script>
</html>

```

6. Design an HTML page with two black square divs center aligned on the page. On hovering the first square div change its color using js, and for the second div change its color using css.

Ans. <!DOCTYPE html>

```

<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link rel="stylesheet" href="divtag.css">
</head>
<body>
  <div class="sq1" onmouseenter="btog()" onmouseleave="gtob()">
  </div>
  <div class = "sq2">
  </div>

```

```

</body>
<script>
    function btog()
    {
        var element = document.getElementsByClassName("sq1")[0];
        element.style.background = "purple";
    }
    function gtob()
    {
        var element = document.getElementsByClassName("sq1")[0];
        element.style.background = "black";
    }
</script>
</html>

```

```

// css file
body{
    display: flex;
    align-items: center;
    justify-content: center;
    height: 100vh
}

```

```

.sq1{
    background-color: black;
    width: 100px;
    height: 100px;
}

```

```

.sq2{
    margin-left: 10px;
    background-color: black;
    width: 100px;
    height: 100px;
}

```

```

.sq2:hover{
    background-color: rgb(111, 111, 173);
}

```

7. Create an HTML input field of type "password" and a checkbox. When the checkbox is checked, show the password as plain text. When the checkbox is

```
Ans. <!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>

  <input type="password" id="passwordInput" placeholder="Enter password">
<br>
  <label for="showPassword">Show Password</label>
  <input type="checkbox" id="showPassword">
</body>
<script>
  const checkbox = document.getElementById("showPassword");
  const passwd = document.getElementById("passwordInput");
  checkbox.addEventListener("click", typechange);
  var text = false;
  function typechange()
  {
    if (text == false){
      passwd.type = "text";
      text = true;
    }
    else{
      passwd.type = "password";
      text = false;
    }
  }
</script>
</html>
```

