1. Display "Hello World" on html page using Java-script.

Solution

```
<!DOCTYPE html>

<html>

<body>

<h2>Hello World Program</h2>

<script>

    document.write('Hello, World!');

</script>

</body>

</html>
```

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2. Write two javascript functions to handle two events :

      1. when mouse key is pressed down : Text colour should be red

      2. when mouse key is released/up : Text colour should be blue

Paragraph for which colour needs to be changed:

"Click this changing-colour text. Mouse-down will change text colour to red while Mouse-up will change it blue."

Solution

```
<!DOCTYPE html>

<html>

<head>

 <meta charset="utf-8">

 <meta name="viewport" content="width=device-width">

 <title>JS Bin</title>

 <script>

   function mouseDown() {

   document.getElementById("myP").style.color = "red";

}

 function mouseUp() {

   document.getElementById("myP").style.color = "green";

}

 </script>

</head>

<body>

 <p id="myP" onmousedown="mouseDown()" onmouseup="mouseUp()">

Click the text! <br>

The mouseDown() function is triggered when the mouse button is pressed down
over this paragraph, and sets the color of the text to red. The mouseUp() function
is triggered when the mouse button is released, and sets the color of the text to
green.

</p>

</body>

</html>
```

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3. Understanding Scope:-

   Create an Object Cat by literal notation.

   Properties of Cat : name:"**Mini**",colour:"**white**",age:**4**

   printInfo: Outer function that will write cat's name, colour and age to console.

   nestedFunction: Nested in printInfo, it will also print cat's name, colour and age on the console.

   Call nestedFunction() via printInfo()

   After creating the above cat object, invoke printInfo() on cat object.

   Note : Make appropriate use of "this" keyword so that both functions will print the correct name, colour and age of cat to console.

Solution

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Document</title>

```html
</head>

<body>

    <script>

        var cat={

            name:"Mini",

            colour:"white",

            age:4,

            printInfo: function(){

                var that=this;

                return function(){

                    return "name"+"  "+that.name+"  "+"colour"+"  "+that.colour+"  "+"age"+"  "+that.age;

                };

            }

        };

        document.write(cat.printInfo()());

    </script>

</body>

</html>
```