# Part 1:**Find the culprits and nail them — debugging javascript**

1. ****Find the culprit****

<!DOCTYPE html>  
<html>  
<body>  
<script>  
alert( “I’m JavaScript!’);  
</script>  
Whats the error in this ?  
</body>  
</html>

**Answer:**

<!DOCTYPE html>

<html>

<body>

    <script>

        alert("I'm JavaScript!");

    </script>

</body>

</html>

**II) Find the culprit and invoke the alert**

fix.html

<!DOCTYPE html>  
<html>  
<body>  
 <script src=”script.js”></script>  
</body>  
</html>

scripts.js

alert(“I’m invoked!”);

**Answer:**

**Index.html**

<!DOCTYPE html>

<html>

<body>

    <script src="scripts.js"></script>

</body>

</html>

**Scripts.js**

alert("I'm invoked!");

****III) Explain the below how it works****

explain.html

<!DOCTYPE html>  
<html>  
<body>  
 <script src=”script.js”></script>  
</body>  
</html>

script.js

alert("I'm JavaScript!");  
alert('Hello') // this line is not having semicolon  
alert(`Wor  
 ld`)  
alert(3 +  
1  
+ 2); // this is multiple line code and its working

**Answer:**

alert("I'm JavaScript!");

alert('Hello');

alert(`World`);

alert(3 + 1 + 2);

**Explain:**

Javascript automatically understood code in multiple lines as single line and automatically aligned in single then process the codes line by line

**IV) Fix the below to alert**Guvi geek

fix.html

<!DOCTYPE html>  
<html>  
<body>  
 <script src=”script.js”></script>  
</body>  
</html>

script.js

let admin=9, fname=10.5;   
fname = "Guvi";  
lname = "geek"  
admin = fname+lname;alert( admin ); // "Guvi geek"

**Answer:**

let admin = 9, fname = 10.5;

fname = 'Guvi';

let lname = 'geek';

admin = `${fname} ${lname}`;

alert(admin);

**V) Fix the below to alert**hello Guvi geek

fix.html

<!DOCTYPE html>  
<html>  
<body>  
 <script src=”script.js”></script>  
</body>  
</html>

script.js

let fname=10.5;   
fname = "Guvi";  
lname = "geek"let name = fname+lname;alert( 'hello ${name}' );

**Answer:**

let fname=10.5;

fname = "Guvi";

let lname = "geek";

let name = fname + ' ' + lname;

alert(`hello ${name}`);

**VI) Fix the below to alert sum of two numbers**

fix.html

<!DOCTYPE html>  
<html>  
<body>  
 <script src=”script.js”></script>  
</body>  
</html>

script.js

let a = prompt("First number?");  
let b = prompt("Second number?");  
alert(a + b);

**Answer:**

let a = +prompt('First number?');

let b = +prompt('Second number?');

alert(a + b);

**VII) If you run the below scritpt you will get “**Code is Blasted**”**

**Explain Why the Code is blasted and how to diffuse it and get “**Diffused**”.**

fix.html

<!DOCTYPE html>  
<html>  
<body>  
 <script src=”script.js”></script>  
</body>  
</html>

script.js

var a = "2" > "12";//Don't touch below this  
if (a) {  
 console.log("Code is Blasted")  
}  
else  
{  
 console.log("Diffused")   
}

**Answer:**

**Explain:** When comparing two strings, "2" > "12", because alphabetically 1 is less than 2. So this is a reason for output is "Code is Blasted".

To get output "Diffused" means give a condition into 2 > 12 in numbers.

var a = 2 > 12;

if (a) {

  console.log('Code is Blasted');

} else {

  console.log('Diffused');

}

**VIII) How to get the correct score in console.**

fix.html

<!DOCTYPE html>  
<html>  
<body>  
 <script src=”script.js”></script>  
</body>  
</html>

script.js

let value = prompt('How many runs you scored in this ball');  
if (value === 4) {  
 console.log("You hit a Four");  
} else if (value === 6) {  
 console.log("You hit a Six");  
} else {  
 console.log("I couldn't figure out");  
}

**Answer:**

let value = +prompt('How many runs you scored in this ball');

if (value === 4) {

  console.log('You hit a Four');

} else if (value === 6) {

  console.log('You hit a Six');

} else {

  console.log("I couldn't figure out");

}

**XI) Fix the code to welcome the Employee**

fix.html

<!DOCTYPE html>  
<html>  
<body>  
 <script src=”script.js”></script>  
</body>  
</html>

script.js

let login = 'Employee';  
let message = (login == 'Employee') ? :  
 (login == 'Director') ? 'Greetings' :  
 (login == '') ? 'No login' :  
 '';console.log(message);

**Answer:**

let login = 'Employee'

let message =

  (login == 'Employee')

    ? `welcome the Employee`

    : (login == 'Director')

    ? `welcome the Director`

    : (login == 'No login')

    ? `No login`

    : `Give the login`;

console.log(message);

**X) Change the code to print**

**3**

**2**

**1**

fix.html

<!DOCTYPE html>  
<html>  
<body>  
 <script src=”script.js”></script>  
</body>  
</html>

script.js

//You can change only 2 characterslet i = 3;while (i) {  
 console.log( --i );  
}

**Answer:**

let i = 3;

while (i) {

  console.log(i);

  --i;

}

**XI) Change the code to print all the gifts**

fix.html

<!DOCTYPE html>  
<html>  
<body>  
 <script src=”script.js”></script>  
</body>  
</html>

script.js

let gifts = ["teddy bear", "drone", "doll"];for (let i = 0; i < 3; i++) {  
 console.log('Wrapped ${'gifts[i]'} and added a bow!');  
}

**Answer:**

let gifts = ['teddy bear', 'drone', 'doll'];

for (let i = 0; i < 3; i++) {

  console.log(`Wrapped ${gifts[i]} and added a bow!`);

}

Whats the msg printed and why?

var lemein = “0”;  
var lemeout = 0;  
var msg = “”;if (lemein) {  
 msg += “hi”;  
 }if (lemeout) {  
 msg += ‘Hello’;  
}console.log(msg);

**Answer:**

Output is “hi”

**Reason:** JavaScript treats non-empty string as true. So first “0” is converted into its boolean value, by automatic type conversion which is true. Therefore, The Output is “hi”.

**Question: 2**

GUVI: Zen Class — Part 2 : Find the culprits and nail them — debugging javascript loops

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Write a code to print the numbers in the array

**Output**: 1234567891011

var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];var new\_string = “”;  
   
for (var i = 1; i < 11; i--) {  
 new\_string += numsArr[i]   
}console.log(new\_string);

**Answer:**

var numsArr = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];

var new\_string = '';

for (var i = 0; i < 11; i++) {

  new\_string += numsArr[i];

}

console.log(new\_string);