**Debugging javascript**

**Wrong code:**

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

**Debug code:**

**<!DOCTYPE html>**

**<html>**

**<body>**

**<script>**

**alert("I’m JavaScript!");// string to be presented with double quotes.**

**</script>**

**What’s the error in this?**

**</body>**

**</html>**

**2.**

**Wrong code:**

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

**Debug code:**

**<!DOCTYPE html>**

**<html>**

**<body>**

**<script>**

**alert( "I’m JavaScript!");// alert keyword and (“message”) should be added instead of calling js file**

**</script>**

**</body>**

**</html>**

**Explain the below how it works**

**1.**

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

**Explanation :**

**The above snippet is a generic boiler plate template to access specific “script .js” file for the control to progress. The snippet is in “hyper text markup language” format.**

**2.**

**alert("I'm JavaScript!");  
alert('Hello') // this line is not having semicolon**

**EXP: they might get added by default internally in the program**

**alert(`Wor**

**ld`)  
alert(3 +  
1  
+ 2); // this is multiple line code and its working**

**EXP: thought it is in multiple line they are embraced with same pair of bracket**

**DEBUGING FOR ALERT MESSAGE:**

**1.**

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

**<script>alert("Guvi geek")</script> // adding this code creates the required alert message.**

**</body>  
</html>**

1. **Wrong code:**

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

**debug:**

**<!DOCTYPE html>**

**<html>**

**<body>**

**<script src=”script.js”></script>**

**// first thing for a code to function is it shield be in a proper template or syntax**

**<script>let admin=9, fname=10.5;**

**fname = "Guvi";**

**lname = "geek"**

**admin = fname+" "+lname;**

**//added or concatenated space by “ “ for “Guvigeek” to be “Guvi geek”**

**alert( admin );</script>**

**</body>**

**</html>**

**3.**

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

**<script>alert(“hello Guvi geek”)</script>**

**//adding script with alert message works out.  
  
</body>  
</html>**

**4.**

**Wrong code:**

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

**correct code:**

**let a = prompt("First number?");**

**let b = prompt("Second number?");**

**var num1 = parseInt(a);**

**var num2 = parseInt(b);**

**alert(num1+num2);**

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

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

**Explanation:**

**If “a” turns to be true for the given comparison condition the code gets blasted and produce “blasted as output. If the condition does not satisfy and tends the control to false which access else class loop and thus will get “diffused” as required**

**6. How to get the success in console.**

**let a = prompt("Enter a number?");//Don't modify any code below this if (a) {  
 console.log( 'OMG it works for any number inc 0' );  
}  
else  
{  
 console.log( "Success" );  
}**

**Explanation:**

**Whenever a number is entered in the prompt box the conditions turns true and for the condition to turn false an input which is not a number have to be provided. Hence, else loop consoles output as “success”**

**7. How to get the correct score in console.**

**Wrong code:**

**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");  
}**

**Debugged code:**

**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 if( value === 1) {**

**console.log("You scored a one");**

**} else if( value === 2) {**

**console.log("You scored a two");**

**} else if( value === 1) {**

**console.log("You scored a three");**

**}else {**

**console.log("No run");**

**}**

**8.**

**Wrong code:**

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

**Debugged output:**

**let login = 'Employee';**

**let message = (login === 'Employee') ? 'welcomeemployee':'greeting'**

**console.log(message);**

##### Output:

**welcome employee**

**9.**

**Wrong code:**

**let message;**

**let lock = 2;**

**//Don’t change any code below this**

**if (null || lock || undefined )**

**{**

**message = "Go away";**

**}**

**else**

**{**

**message = "welcome";**

**}**

**console.log(message);**

**Debugged code:**

**let message;**

**let lock ;**

**// leaving no value to lock initiates else loop to display welcome**

**//Don’t change any code below this**

**if (null || lock || undefined )**

**{**

**message = "Go away";**

**}**

**else**

**{**

**message = "welcome";**

**}**

**console.log(message);**

**11.**

**Wrong code:**

**let message;  
let lock = 2;//Dont change any code below thisif (lock && " " || undefined )  
{  
 message = "Go away";  
}  
else  
{  
 message = "welcome";  
}  
console.log(message);**

**Debugged code:**

**let message;  
let lock ;//Don’t change any code below this if (lock && " " || undefined )**

**// leaving no value to lock initiates else loop to display welcome**

**{  
 message = "Go away";  
}  
else  
{  
 message = "welcome";  
}  
console.log(message);**

**12.**

**Wrong code:**

**let i = 3;**

**while (i ) {**

**console.log( --i );**

**}**

**Debugged code:**

**let i = 3;**

**while (i ) {**

**console.log( i-- );// pre increment to post increment**

**}**

**13.**

**Wrong code:**

**for (let num = 2; num<= 20; num += 1) {**

**console.log(num)**

**}**

**Debugged code:**

**for (let num = 2; num<= 20; num += 2) {**

**console.log(num)**

**}**

**14.**

**Wrong code:**

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

**Debugged code:**

**let gifts = ["teddy bear", "drone", "doll"];**

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

**console.log(`${gifts[i]}`) ;**

**}**

##### Output:

**teddy bear**

**drone**

**doll**

**15.What’s the message printed and why?**

**var lemein = "0";**

**var lemeout = 0;**

**var msg = "";**

**if (lemein) {**

**msg += "hi";**

**}**

**if (lemeout) {**

**msg += "Hello";**

**}**

**console.log(msg);**

##### Output:

**Hi //because “0” is a string**

**Part 2**

**1.**

**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);**

##### Output:

**1234567891011**

**2. Write a code to print the numbers in the array**

**Output: 1,2,3,4,5,6,7,8,9,10,11**

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

**varnew\_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);**

##### Output:

**1,2,3,4,5,6,7,8,9,10,11,**

**3. Write a code to print from last to first with spaces (Make sure there is no space after the last element 1)**

**Output: 11 10 9 8 7 6 5 4 3 2 1**

**var new\_string = “”;  
  
for (var i = 11; i> 0; i— ) {  
new\_string += numsArr[i] + “ “   
}  
console.log(new\_string);**

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

**var new\_string = "";**

**for (var i = 10; i>= 0; i--) {**

**new\_string += numsArr[i] + " "**

**}**

**console.log(new\_string);**

##### Output:

**11 10 9 8 7 6 5 4 3 2 1**

**4. Write a code to replace the array value — If the number is even, replace it with ‘even’.**

**Output:[ 1, “even”, 3, “even”, 5, “even”, 7, “even”, 9, “even”, … ]**

**var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];for (var i = 0; i<=10; i++) {  
 if(numsArr[i] %2 == 0 )  
 {  
numsArr[i] = odd  
 }  
}  
console.log(numsArr);**

**Answer:**

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

**for (var i = 0; i<=10; i++) {**

**if(numsArr[i] %2 === 0 )**

**{**

**numsArr[i] = "even"**

**}**

**}**

**console.log(numsArr);**

##### Output:

**[ 1, 'even', 3, 'even', 5, 'even', 7, 'even', 9, 'even', 11 ]**

**5. Write a code to replace the array value — If the index is even, replace it with ‘even’.**

**Output: [ “even”, 2, “even”, 4, “even”, 6, “even”, 8, “even”, 10, … ]**

**var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];for (var i = 0; i<=10; i++) {  
 if(numsArr[i] %2 == 0 )  
 {  
numsArr[i] = even  
 }  
}  
console.log(numsArr);**

**Answer:**

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

**for (var i = 0; i<=10; i++) {**

**if(numsArr[i] %2 != 0 )**

**{**

**numsArr[i] = "even"**

**}**

**}**

**console.log(numsArr);**

##### Output:

**[ 'even', 2, 'even', 4, 'even', 6, 'even', 8, 'even', 10, 'even' ]**

**6. Write a code to add all the numbers in the array**

**Output: 66**

**var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];for (var i = 0; i<=10; i++) {  
 var sum;  
 sum += numsArr[i]  
}  
console.log(sum);**

**Answer:**

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

**var sum =0;**

**for (var i = 0; i<=10; i++) {**

**sum += numsArr[i]**

**}**

**console.log(sum);**

##### Output:

**66**

**7.Write a code to add the even numbers only  
Output: 30**

**var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];  
var sum=0;for (var i = 0; i<10; i++) {  
 if(numsArr[i]%2==0);  
 sum += numsArr[i]  
}  
console.log(sum);**

**Answer:**

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

**var sum=0;**

**for (var i = 0; i<10; i++) {**

**if(numsArr[i]%2==0){**

**sum += numsArr[i]**

**}**

**}**

**console.log(sum);**

##### Output:

**30**

**8. Write a code to add the even numbers and subtract the odd numbers  
Output: 94**

**var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];  
var sum=100;for (var i = 0; i<=10; i++) {  
 if(numsArr[i]%2!=0);  
 {  
 sum += numsArr[i]  
 }  
 else  
 {  
 sum -= numsArr[i]  
 }  
}  
console.log(sum);**

**Answer:**

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

**var sum=100;**

**for (var i = 0; i<=10; i++)**

**{**

**if(numsArr[i]%2!==0)**

**{sum+= numsArr[i];}**

**else**

**{sum-= numsArr[i];}**

**}**

**console.log(sum);**

##### Output:

**106**

**Part 3**

**Swap the odd and even digits**

**aa = data=>{**

**var a=data;**

**for(i=0;i<a.length-1;i++){**

**var l='';**

**var s=a[i+1]**

**var b=a[i]**

**l+=s**

**l+=b**

**i=i+1**

**if((a.length%2)!==0){**

**l+=a[a.length-1]**

**}**

**console.log(l);**

**}**

**}**

**aa("1234");**

##### Output:

**21**

**43**

**Part 3**

**Fix the code to get the largest of three.**

**Code:**

**aa = (f,s,t) => {  
 let f,s,t;  
 console.log(f,s,t);  
 if(f>s &&f>t){  
 console.log(f)}  
 else if(s>f && s>t){  
 console.log(s)}  
 else{  
 console.log(t)}  
}aa(1,2,3);**

**Debugged code:**

**aa = (f,s,t) => {**

**if(f>s &&f>t){**

**console.log(f)}**

**else if(s>f && s>t){**

**console.log(s)}**

**else{**

**console.log(t)}**

**}**

**aa(1,2,3);**

##### Output:

**3**

**2. Fix the code to Sum of all numbers using IIFE function**

**Code:**

**const arr = [9,8,5,6,4,3,2,1];(function() {  
 let sum = 0;  
 for (var i = 0; i<= arr.length; i++);{  
 sum += arr[i];  
 }  
 console.log(sum);  
 return sum;  
})();**

**Debugged code:**

**( function()**

**{**

**let arr = [9,8,5,6,4,3,2,1]**

**let sum = 0**

**for (var i = 0; i<arr.length; i++)**

**{**

**sum = sum + arr[i];**

**}**

**console.log(sum);**

**}**

**)();**

##### Output:

**38**

**3. Fix the code to gen Title caps.**

**Code:**

**var arr = [“guvi”, “geek”, “zen”, “fullstack”];varano = function(arro) {  
 for (var i = 0; i<= arro.length; i++) {  
 console.log(arro[i][0].toUpperCase() + arro[i].substr(1));  
 }  
}  
ano();**

**Debugged code:**

**var arr = ["guvi", "geek", "zen", "fullstack"];**

**var ano = function(arro) {**

**for (var i = 0; i<= arro.length; i++) {**

**console.log(arro[i][0].toUpperCase() + arro[i].substr(1));**

**}**

**}**

**ano(arr);**

##### Output:

**Guvi**

**Geek**

**Zen**

**Fullstack**

**Fix the code to sum the number in that array**

**Code:**

**const num = [10, 20, 30, 40,50,60,70,80,90,100]   
const sum = (a, b) =>  
 a + b  
const sum = num.reduce(sum)  
console.log(sum);**

**Debugged code:**

**let num = [10,20,30,40,50,60,70,8,90,100]**

**let sum = 0**

**let compute =(num)=>{**

**for (var i = 0; i<num.length; i++) {**

**sum = sum + num[i];**

**}**

**console.log(sum);**

**}**

**compute(num);**

##### Output:

**478**

**Fix the code to gen Title caps.**

**Code:**

**var arr = [“guvi”, “geek”, “zen”, “fullstack”];(function() {  
 for (var i = 0; i<= arr.length; i++) {  
 console.log(arr[0][i].toUpperCase() + arr[i].substr(1));  
 }  
})();**

**Debugged code:**

**var arr = ["guvi","geek","zen","fullstack"];**

**(function() {**

**for (var i = 0; i<= arr.length; i++)**

**{**

**console.log(arr[i].charAt(0).toUpperCase() + arr[i].slice(1));**

**}**

**})();**

##### Output:

**Guvi**

**Geek**

**Zen**

**Fullstack**

**Print all odd numbers in an array using IIFE function**

**Code:**

**var arr = [1, 2, 3, 5, 7, 79, 7, 2, 6, 9, 4];(function() {  
 for (var i = 0; i<arr.length; i++) {  
 if (arr[i] % 2 === 0) {  
 console.log(arr[i]);  
 }}  
})();**

**Debugged code:**

**(function()**

**{**

**let arr = [1, 2, 3, 5, 7, 79, 7, 2, 6, 9, 4]**

**let odds = arr.filter(n => n % 2)**

**console.log(odds)**

**}**

**)();**

##### Output:

**[1, 3, 5, 7, 79, 7, 9]**