GUVI: Zen Class — Part 3: Find the culprits and nail them — debugging javascript

1. **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);
```

Solution: Incorrect are highlight and correct code is written below:

```
var 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);
```

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2. Fix the code to Sum of the digits present in the number

Code:
```
let n = 123;
```

```
console.log(add(n));

function add(n)
{
let sum = 10;
for(var i=0;i<n.length;i++){
 sum+=n[i]
 }
 return sum;
}
```

Solution: Incorrect are highlight and correct code is written below:

```
let n = 123;
let num = n.toString().split("");
console.log(add(num));

function add(n)
{
let sum = 10;
for(var i=0;i<n.length;i++){
 sum+= parseInt(n[i])
 }
 return sum;
}
```

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3. 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;
})();
```

```
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;
})();
```

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4. Fix the code to gen Title caps.

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();
```

```
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);
```

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5. Fix the code to return the Prime numbers

Code:

```
const newArray=[1,3,2,5,10];
const myPrime=newArray.filter(num=>{
 for(let i=2;i<=num;i++){
 if(num%i===0)
 {
 return true;
 }
 }
 return num===1;
});
console.log(myPrime);
```

Solution: Incorrect are highlight and correct code is written below:

```
const newArray=[1,3,2,5,10];
const myPrime=newArray.filter(num =>{
    for (let i = 2; i <= Math.sqrt(num); i++) {
        if (num === 1) return true;
        else {
            if (num % i === 0) return false;
        }
    }
    return true;
});

console.log(myPrime);
```

——

6. 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);
```

Solution: Incorrect are highlight and correct code is written below:

```
const num = [10, 20, 30, 40,50,60,70,80,90,100]
var sum = (a, b) => {
 return (a + b);
}

sum = num.reduce(sum)
console.log(sum);
```

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7. Fix the code to rotate an array by k times and return rotated array using IIFE function

Code:
```
var arr = [1, 2, 3, 6, 8, 6, 1, 9, 10, 12, 13];
var k = 3;
k = arr.length % k;
(function() {
 arr = {};
 out = arr.slice(k + 1, arr.length);
 var count = out.length;
 for (var i = 0; i < k + 1; i++) {
 out[count] = arr[i];
 count += 1;
 }
 console.log(out);})();
```

Solution: Incorrect are highlight and correct code is written below:

```
var arr = [1, 2, 3, 6, 8, 6, 1, 9, 10, 12, 13];
var k = 3;
k = arr.length % k;
(function () {
    var out = arr.slice(k + 1, arr.length);
    var count = out.length;
```

```
    for (var i = 0; i < k + 1; i++) {
        out[count] = arr[i];
        count += 1;
    }
    console.log(out);
})();
```

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8. 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));
  }
})();


Solution: Incorrect are highlight and correct code is written
below:
```

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

(function () {
 for (var i = 0; i < arr.length; i++) {
 console.log(arr[i][0].toUpperCase() + arr[i].substr(1));
 }
})();
```

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9. 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]);
 }}
})();
```

Solution: Incorrect are highlight and correct code is written below:

```
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]);
 }}
})();
```

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10. Fix the code to reverse.

Code:
```
(function(str){
 str1 = str.split(" ").reverse().join("");
 console.log(str1);
})("abcd")
```

Solution: Incorrect are highlight and correct code is written below:

```
(function(str){
    var str1 = str.split("").reverse().join("");
    console.log(str1);
   })("abcd")
```

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11. **Fix the code to remove duplicates.**

Code:

```
var res = function(arr){
 for(var i=0; i < arr.length; i++){
 newArr = [];
 if(newArr.indexOf(arr[i]) == -1) {
 newArr.push(arr[i]);
 } }
 console.log(newArr)
}res(["guvi","geek","guvi","duplicate","geeK"])
```

Solution: Incorrect are highlight and correct code is written below:

```
var res = function (arr) {
    var newArr = [];
    for (var i = 0; i < arr.length; i++) {
        if (newArr.indexOf(arr[i]) == -1) {
            newArr.push(arr[i]);
        }
    }
    console.log(newArr)
}
res(["guvi", "geek", "guvi", "duplicate", "geek"])
```

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12. **Fix the code to give the below output:**

Expected Output:

[

{firstName: "Vasanth", lastName: "Raja", age: 24, role: "JSWizard"},

{firstName: "Sri", lastName: "Devi", age: 28, role: "Coder"}

]

Code:

```
var array
=[[["firstname","vasanth"],["lastname","Raje"],["age",24],["role","
JSWizard"]],[["firstname","Sri"],["lastname","Devi"],["age",28],["r
ole", "Coder"]]];
var final=[]
while(array.length!=0)
{
 var outer_remove = array.shift();

 while(outer_remove.length!=0)
 {
 var inner_remove = outer_remove.shift()
 var key = inner_remove[0]
 var value =inner_remove[1]
 new_object[key]=value
 }
 final.push(new_object)
}
```

Solution: Incorrect are highlight and correct code is written
below:

```
var array = [[["firstname","vasanth"], ["lastname","Raje"], ["age", 24],
["role","JSWizard"]], [["firstname","Sri"], ["lastname","Devi"], ["age", 28],
["role", "Coder"]]];
var final = []
while (array.length != 0) {
    var outer_remove = array.shift();

    while (outer_remove.length != 0) {
        var inner_remove = outer_remove.shift()
        var key = inner_remove[0]
        var value = inner_remove[1]
        new_object[key] = value
    }
    final.push(new_object)
}
```

13. Fix the code to give the below output:

Sum of odd numbers in an array

Code:

```
var as=[12,34,5,6,2,56,6,2,1];
var s=as.reduce(function(a,c){
 if(c%2!=0)
 {
 return a+c;
 }
 return a;});
console.log(s);
```

Solution: Incorrect are highlight and correct code is written below:

```
var as = [12, 34, 5, 6, 2, 56, 6, 2, 1];
var s = as.reduce(function (a, c) {
    if (c % 2 != 0) {
        return a + c;
    }
    return a;
});
console.log(s);
```

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14. Fix the code to give the below output:

Swap the odd and even digits

Code:

```
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");
```

Solution: Incorrect are highlight and correct code is written below:

```
var aa = data => {
    var a = data;
    var l = "";
    for (var i = 0; i < a.length - 1; i++) {
        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");
```