

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

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);
```

Solution:

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

var new_string = "";

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

  new_string += numsArr[i]

}

console.log(new_string);
```

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];

var new_string = "";

for (var i = 1; i < 11; i++) {
  new_string += numsArr[i] + ,
}

console.log(new_string);
```

Solution:

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

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);
```

Solution:

```
var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];  
var new_string = "";  
for (var i = numsArr.length - 1; i >= 0; i--) {  
    new_string += numsArr[i] + " "  
}  
console.log(new_string);
```

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);
```

Solution:

```
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);
```

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(i %2 == 0 )  
  {numsArr[i] = even}  
}  
console.log(numsArr);
```

Solution:

```
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);
```

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);
```

Solution:

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

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);
```

Solution:

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

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);
```

Solution:

```
var numsArr = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12];  
var sum = 100;  
for (var i = 0; i < numsArr.length; i++) {  
    if (i % 2 == 0)  
        sum += numsArr[i];  
    else  
        sum -= numsArr[i];  
}  
console.log(sum);
```

9. Write a code to print inner arrays

Output:

Array(5) [1, 2, 3, 4, 5]

Array(6) [6, 7, 8, 9, 10, 11]

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

Solution:

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