

Basic Constructs: Conditional Statements And Iterative Statements

Assignment Solution



Problem Statement - 1

Iterate from 1 to 100(using for loop and if else statement) (Submittable assignment)

- Print Relevel if divisible by 3
- Print Buzz if divisible by 5
- Print MindBuzz if divisible by 15
- Print the number if all the above condition fails

Solution:

```
for(let i=1;i<=100;i++){  
  if(i%3==0 && i%5==0){  
    console.log("MindBuzz");  
  }  
  else if(i%3==0){  
    console.log("Relevel");  
  }  
  else if(i%5==0){  
    console.log("Buzz");  
  }  
  else{  
    console.log(i);  
  }  
  
}
```

Output:

```
1  
2  
"Relevel"  
4  
"Buzz"  
"Relevel"  
.  
.  
.  
.  
.  
"Buzz"  
"Relevel"  
97  
98  
"Relevel"  
"Buzz"
```

To run the code live and test click [here](#)

Problem Statement - 2

Program to check if a number is odd or even (Submittable assignment)

Solution:

```
function check(n) {  
  if (n%2==0) {  
    console.log("Number is even");  
  }  
  else{  
    console.log("Number is odd");  
  }  
}  
  
check(101);  
check(100);
```

Output:

```
"Number is odd"  
"Number is even"
```

To run the code live and test click [here](#)

Problem Statement - 3

Program to check if a number is a perfect square (Submittable assignment)

Solution:

```
function isPerfectSquare(n) {  
  var x=Math.floor(Math.sqrt(n));  
  if (x*x==n) {  
    return true;  
  }  
  else{  
    return false;  
  }  
}  
  
console.log(isPerfectSquare(101));  
console.log(isPerfectSquare(100));
```

Output:

false
true

To the code live and test click [here](#)

Development Question:

Create a ChessBoard like structure using JS

- Use nested for loop to create Chessboard like structure
- Use | to separate each numbers and it will look like a box

```
"| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |"  
"| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |"  
"| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |"  
"| 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |"  
"| 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |"  
"| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |"  
"| 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |"  
"| 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 |"
```

Solution:

```
var k = 1;  
for(let i =1;i<=8;i++){  
  let inner = [];  
  for(let j=1;j<=8;j++){  
    inner.push(k++);  
  }  
  console.log('| ' + inner.join(' | ') + ' |');  
}
```

To the code live and test click [here](#)