

For Loops

Formative Assessment

Mild

1. Print the numbers from 0 to 9 using one for loop.
2. Add the numbers from 0 to 20 using a for loop. Hint: save the sum to a variable which gets added after each iteration.

Write code here:

Solution

1.

```
for (var i = 0; i < 10; i++){  
  console.log(i);  
}
```

2.

```
var sum = 0;  
for (var i = 0; i < 21; i++){  
  sum += i;  
}  
console.log(sum)
```

Medium

1. Print the numbers in descending order from 9 to 0, using a for loop.
2. Create a multiplication table for an integer, print out the multiples using a single for loop.

Write code here:

Solution

1.

```
for(var i = 9; i >= 0; i--){  
  console.log(i);  
}
```

2.

```
for (var i = 0; i < 11; i++){  
  console.log( i + "*" + "3 = " + 3*i);  
}
```

Spicy

1. Prompt the user for a number then print from that 0 to that number. If the user puts in a negative number, ask them to put in a positive number instead.
2. Using a for loop, give the factorial of a number that you ask for.

Write code here:

Solution

1.

```
var num = prompt("Input a number");
if (num < 0){
    var num = prompt("Input a positive number");
}

for (var i = 0; i <= num; i++){
    console.log(i);
}
```

2.

```
var num = prompt("Input a number");
var factorial = 1;
for (var i = 1; num >= i; i++){
    factorial *= i;
}
console.log(factorial);
```