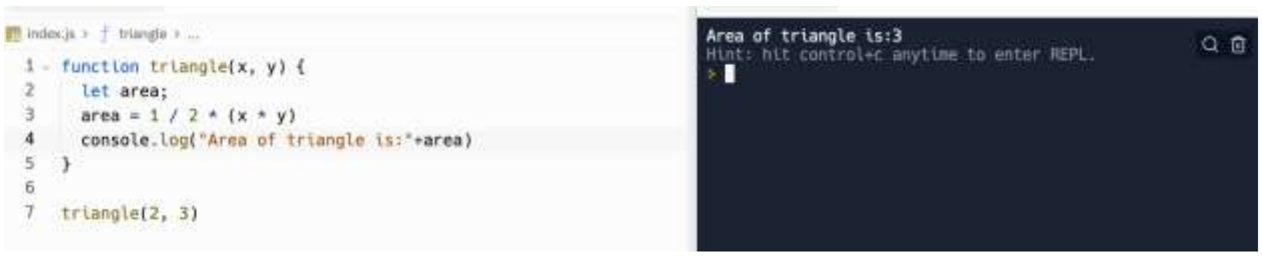
Area of a Triangle

Write a function that takes the base and height of a triangle and `return` its area.

Examples

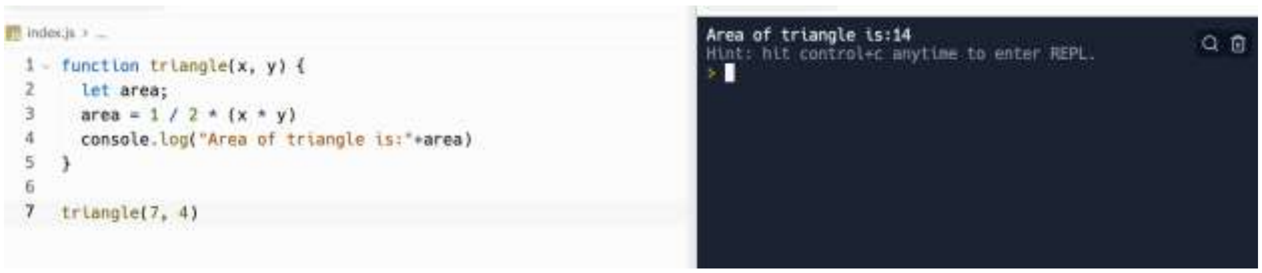
`triArea(3, 2) ➞3`



```
function triangle(x, y) {
  let area;
  area = 1 / 2 * (x * y)
  console.log("Area of triangle is:"+area)
}

triangle(2, 3)
```

```
Area of triangle is:3
Hint: hit control+c anytime to enter REPL.
> 
```

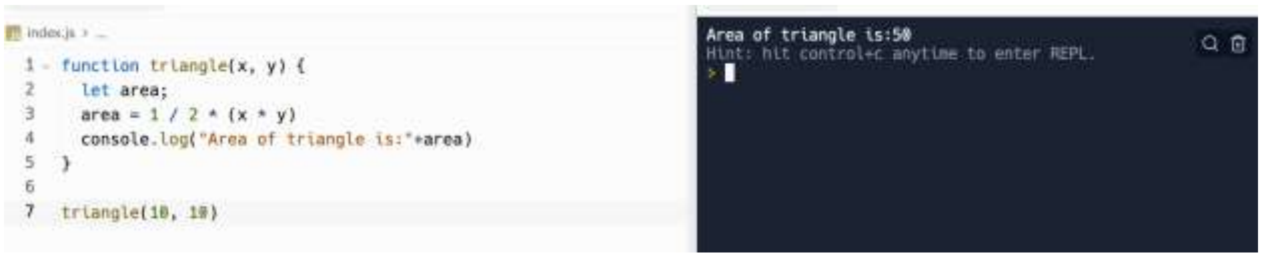
`triArea(7, 4) ➞14`



```
function triangle(x, y) {
  let area;
  area = 1 / 2 * (x * y)
  console.log("Area of triangle is:"+area)
}

triangle(7, 4)
```

```
Area of triangle is:14
Hint: hit control+c anytime to enter REPL.
> 
```

`triArea(10, 10) ➞50`



```
function triangle(x, y) {
  let area;
  area = 1 / 2 * (x * y)
  console.log("Area of triangle is:"+area)
}

triangle(10, 10)
```

```
Area of triangle is:50
Hint: hit control+c anytime to enter REPL.
> 
```

Notes

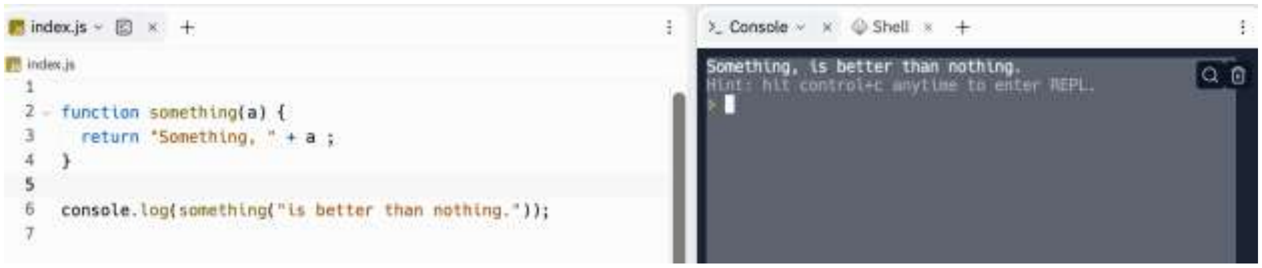
- The area of a triangle is: `(base * height) / 2`
- Don't forget to `return` the result.

Return Something to Me!

Write a function that returns the string `"something"` joined with a space `" "` and the given argument `a`.

Examples

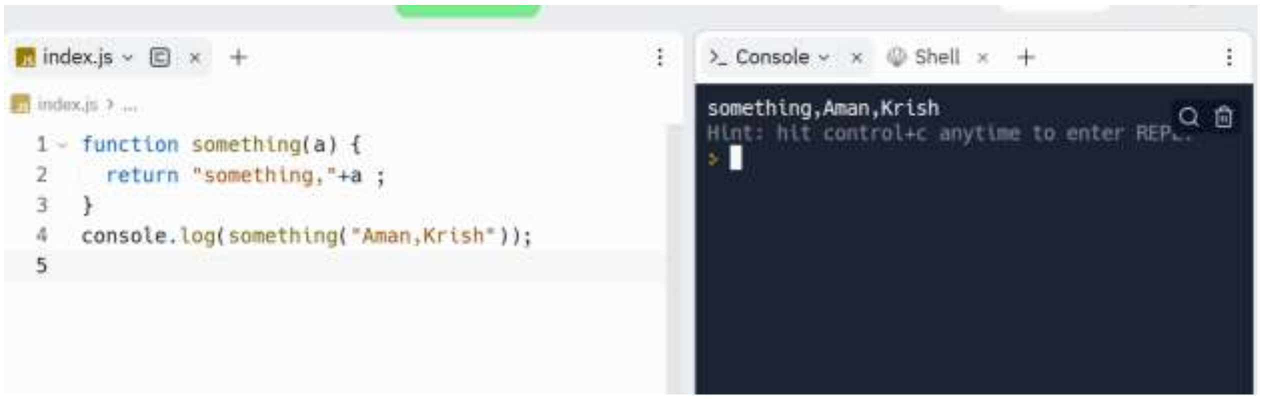
```
giveMeSomething("is better than nothing") ➞"something is better than
```



```
function something(a) {
  return "Something, " + a ;
}

console.log(something("is better than nothing."));
```

```
Something, is better than nothing.
Hint: hit control+c anytime to enter REPL.
>
```

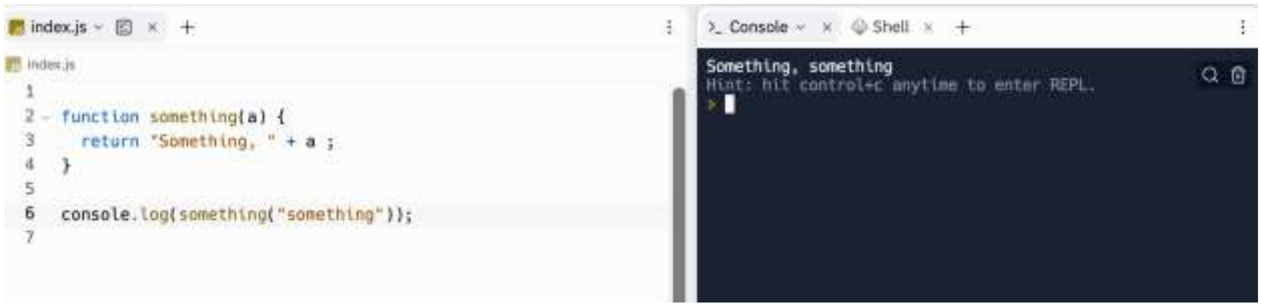
nothing" giveMeSomething("Bob Jane") ➞"something Bob Jane"



```
function something(a) {
  return "something,"+a ;
}
console.log(something("Aman,Krish"));
```

```
something,Aman,Krish
Hint: hit control+c anytime to enter REPL.
>
```

giveMeSomething("something") ➞"something something



```

function something(a) {
  return "Something, " + a ;
}

console.log(something("something"));

```

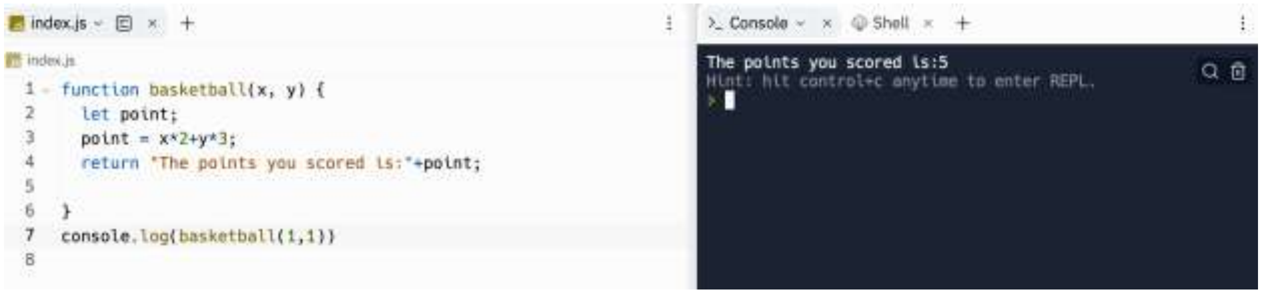
```
Something, something
Hint: hit control+c anytime to enter REPL.
>
```

Basketball Points

You are counting points for a basketball game, given the amount of 2-pointers scored and 3-pointers scored, find the final points for the team and return that value.

Examples

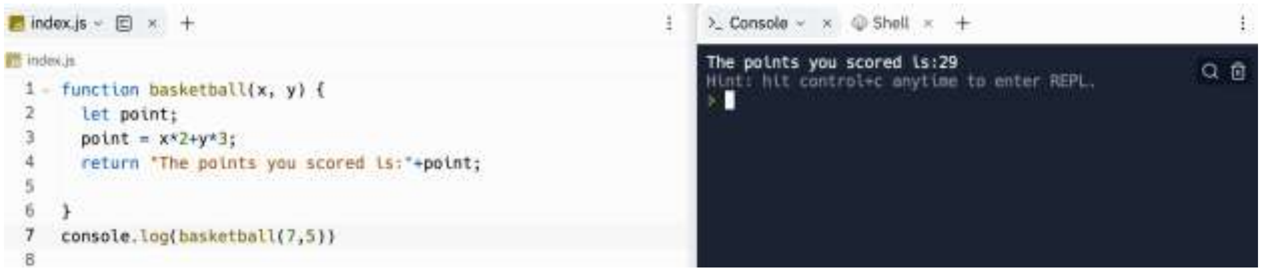
`points(1, 1) ➞5`



```
function basketball(x, y) {
  let point;
  point = x*2+y*3;
  return "The points you scored is:"+point;

}
console.log(basketball(1,1))
```

```
The points you scored is:5
Hint: hit control+c anytime to enter REPL.
>
```

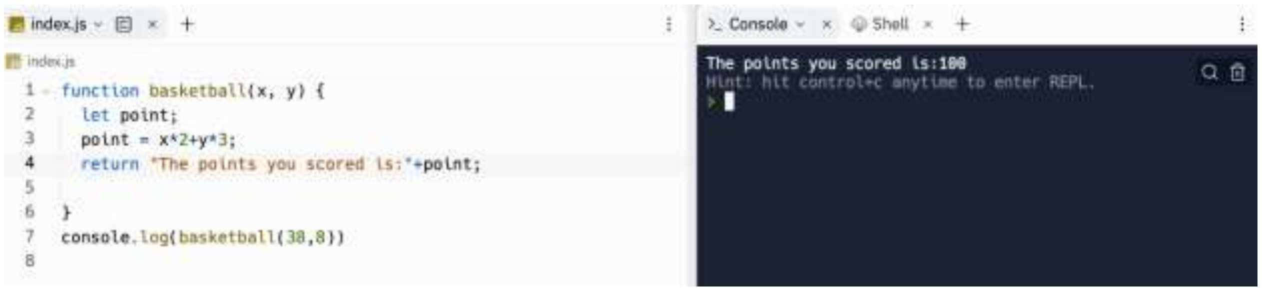
`points(7, 5) ➞29`



```
function basketball(x, y) {
  let point;
  point = x*2+y*3;
  return "The points you scored is:"+point;

}
console.log(basketball(7,5))
```

```
The points you scored is:29
Hint: hit control+c anytime to enter REPL.
>
```

```
points (38, 8) ➞100
```



```javascript
function basketball(x, y) {
  let point;
  point = x*2+y*3;
  return "The points you scored is:"+point;

}
console.log(basketball(38,8))
```

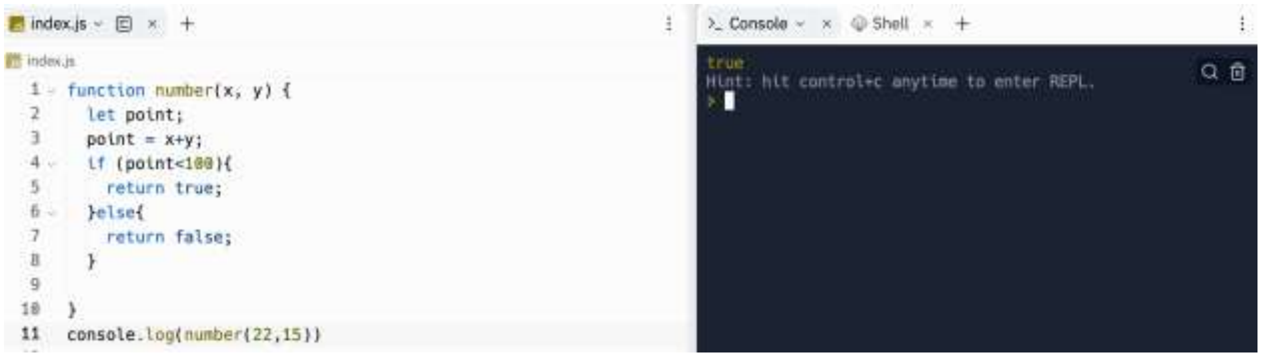
```
The points you scored is:100
Hint: hit control+c anytime to enter REPL.
>
```

Less Than 100?

Given two numbers, return `true` if the sum of both numbers is less than 100.

Otherwise return `false`. **Examples**

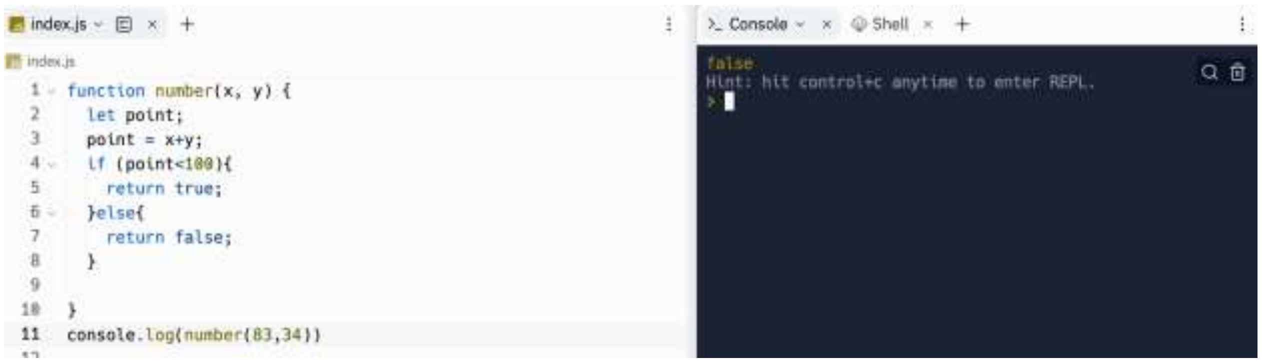
```
lessThan100(22, 15) ➞true

// 22 + 15 = 37
```



```javascript
function number(x, y) {
  let point;
  point = x+y;
  if (point<100){
    return true;
  }else{
    return false;
  }

}
console.log(number(22,15))
```

```
true
Hint: hit control+c anytime to enter REPL.
>
```

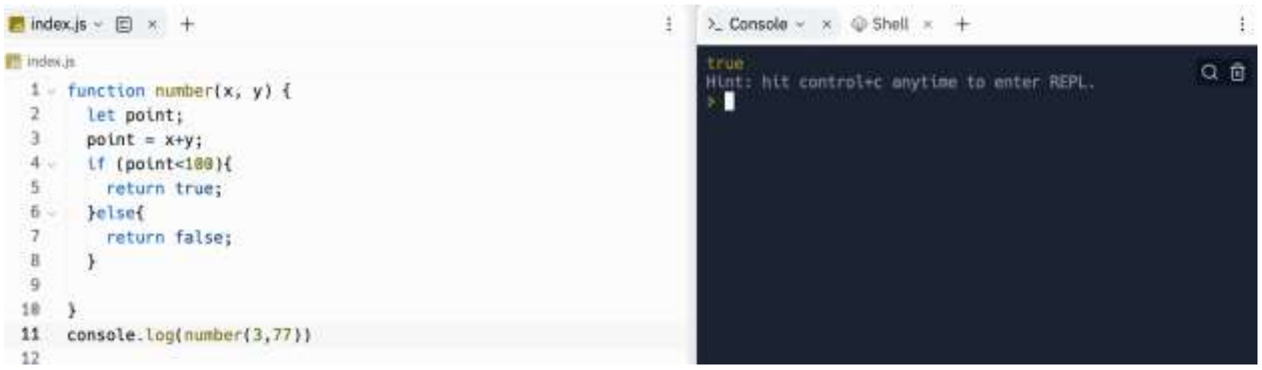
```
lessThan100(83, 34) ➞false

// 83 + 34 = 117
```



```
index.js
function number(x, y) {
  let point;
  point = x+y;
  if (point<100){
    return true;
  }else{
    return false;
  }

}
console.log(number(83,34))
```

```
false
Hint: hit control+c anytime to enter REPL.
>
```

```
lessThan100(3, 77) ➞true
```



```
index.js
function number(x, y) {
  let point;
  point = x+y;
  if (point<100){
    return true;
  }else{
    return false;
  }

}
console.log(number(3,77))
```

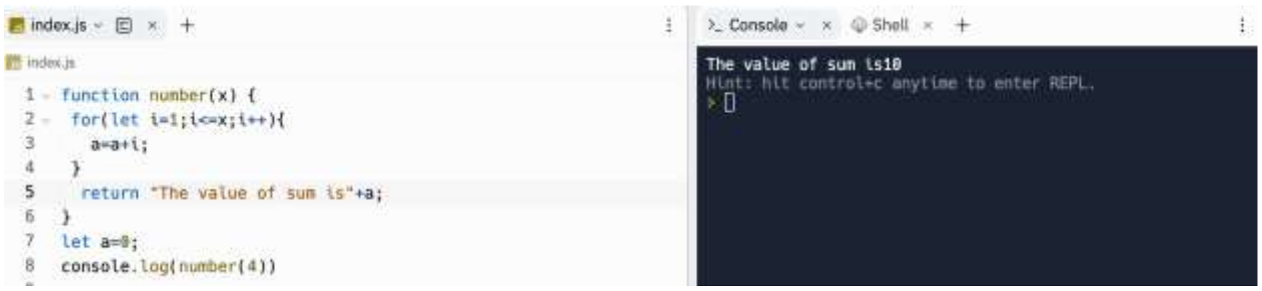
```
true
Hint: hit control+c anytime to enter REPL.
>
```

Add up the Numbers from a Single Number

Create a function that takes a number as an argument. Add up all the numbers from 1 to the number you passed to the function. For example, if the input is 4 then your function should return 10 because 1 + 2 + 3 + 4 = 10.

Examples

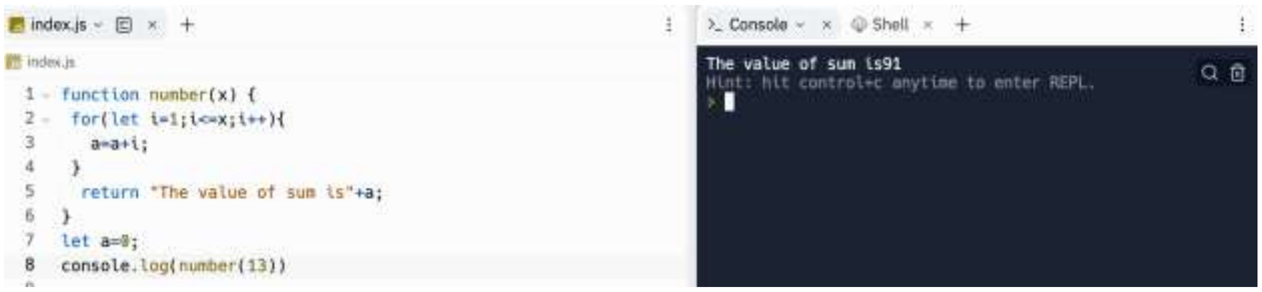
addUp(4) ➞10



```
function number(x) {
 for(let i=1;i<=x;i++){
   a=a+i;
 }
  return "The value of sum is"+a;
}
let a=0;
console.log(number(4))
```

```
The value of sum is10
Hint: hit control+c anytime to enter REPL.
>
```

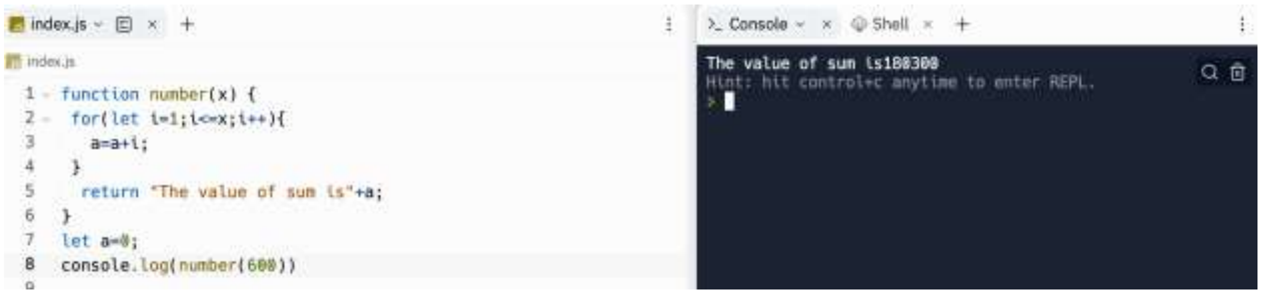
addUp(13) ➞91



```
function number(x) {
 for(let i=1;i<=x;i++){
   a=a+i;
 }
  return "The value of sum is"+a;
}
let a=0;
console.log(number(13))
```

```
The value of sum is91
Hint: hit control+c anytime to enter REPL.
>
```

addUp(600) ➞180300



```
function number(x) {
 for(let i=1;i<=x;i++){
   a=a+i;
 }
  return "The value of sum is"+a;
}
let a=0;
console.log(number(600))
```

```
The value of sum is180300
Hint: hit control+c anytime to enter REPL.
>
```

Notes

Expect any positive number between 1 and 1000.

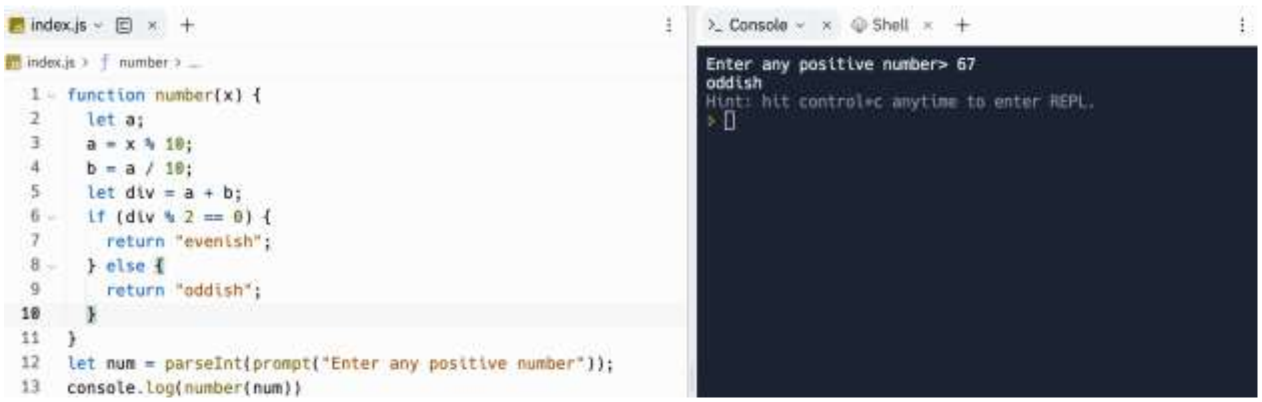
Oddish vs. Evenish

Create a function that determines whether a number is **Oddish** or **Evenish**. A number is **Oddish** if the sum of all of its digits is odd, and a number is **Evenish** if the sum of all of its digits is even. If a number is **Oddish**, return `"Oddish"`. Otherwise, return `"Evenish"`.

For example, `oddishOrEvenish(121)` should return `"Evenish"`, since 1 + 2 + 1 = 4. `oddishOrEvenish(41)` should return `"Oddish"`, since 4 + 1 = 5.

Examples

```
oddishOrEvenish(43) ➞"Oddish"
// 4 + 3 = 7

// 7 % 2 = 1

oddishOrEvenish(373) ➞"Oddish"

// 3 + 7 + 3 = 13

// 13 % 2 = 1

oddishOrEvenish(4433) ➞"Evenish"

// 4 + 4 + 3 + 3 = 14

// 14 % 2 = 0
```



```
function number(x) {
  let a;
  a = x % 10;
  b = a / 10;
  let div = a + b;
  if (div % 2 == 0) {
    return "evenish";
  } else {
    return "oddish";
  }
}
let num = parseInt(prompt("Enter any positive number"));
console.log(number(num))
```

```
Enter any positive number> 67
oddish
Hint: hit control+c anytime to enter REPL.
> 
```

Any Prime Number in Range

Create a function that returns `true` if there's at least one prime number in the given range

(`n1` to `n2` (inclusive)), `false` otherwise. **Examples**

```
primeInRange(10, 15) ➞true //

Prime numbers in range: 11, 13

primeInRange(62, 66) ➞false

// No prime numbers in range.

primeInRange(3, 5) ➞true

// Prime numbers in range: 3, 5
```

Notes

- `n2` is always greater than `n1`.
- `n1` and `n2` are always positive.
- 0 and 1 aren't prime numbers.

Left Shift by Powers of Two

The left shift operation is similar to multiplication by powers of two.

Sample calculation using the left shift operator (<<):

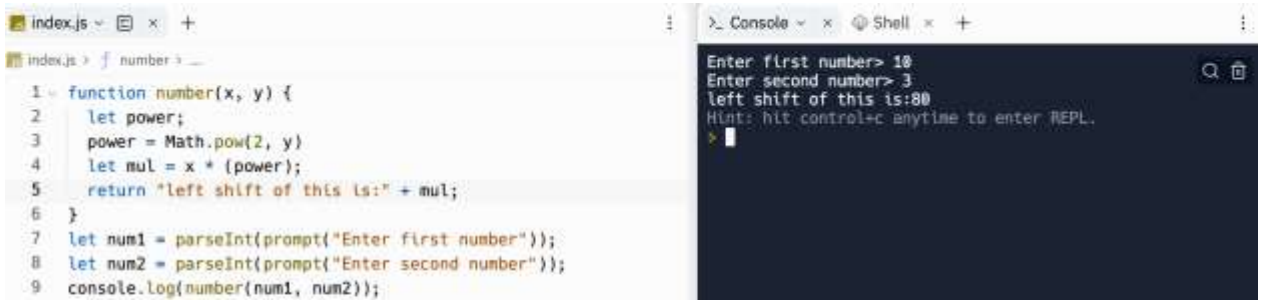
```
10 << 3 = 10 * 2^3 = 10 * 8 = 80
-32 << 2 = -32 * 2^2 = -32 * 4 = -128
5 << 2 = 5 * 2^2 = 5 * 4 = 20
```

Write a function that mimics (without the use of <<) the left shift operator and returns the result from the two given integers.

Examples

`shiftToLeft(5, 2) ➞ 20`

`shiftToLeft(10, 3) ➞ 80`



```
function number(x, y) {
  let power;
  power = Math.pow(2, y)
  let mul = x * (power);
  return "left shift of this is:" + mul;
}
let num1 = parseInt(prompt("Enter first number"));
let num2 = parseInt(prompt("Enter second number"));
console.log(number(num1, num2));
```

```
Enter first number> 10
Enter second number> 3
left shift of this is:80
Hint: hit control+c anytime to enter REPL.
> 
```

`shiftToLeft(-32, 2) ➞ -128`

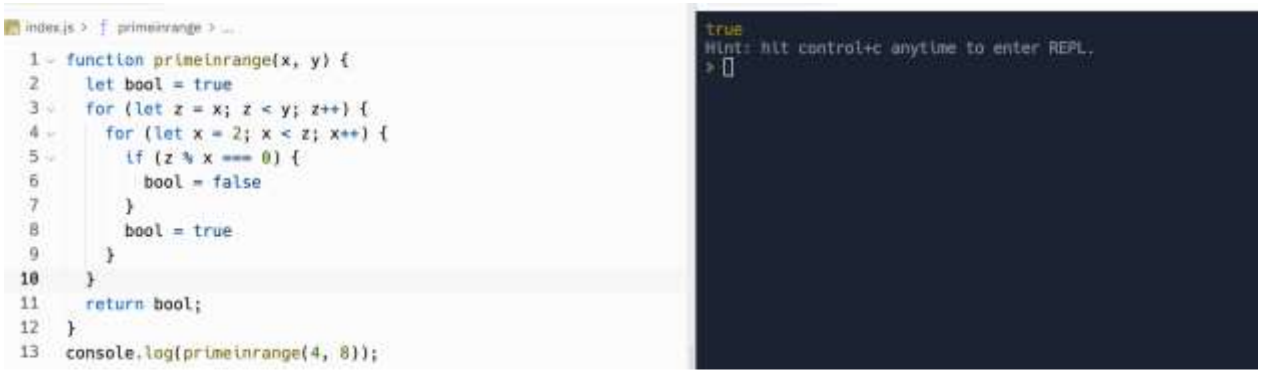
`shiftToLeft(-6, 5) ➞ -192`

`shiftToLeft(12, 4) ➞ 192`

`shiftToLeft(46, 6) ➞ 2944`

Notes

- **There will be no negative values for the second parameter `y`.**
- **This challenge is more like recreating the left shift operation, thus, the use of the operator directly is prohibited.**
- **Alternatively, you can solve this challenge via recursion.**



```
function primeinrange(x, y) {
  let bool = true
  for (let z = x; z < y; z++) {
    for (let x = 2; x < z; x++) {
      if (z % x === 0) {
        bool = false
      }
      bool = true
    }
  }
  return bool;
}
console.log(primeinrange(4, 8));
```

```
true
Hint: hit control+c anytime to enter REPL.
> 
```

Convert a Number to Base-2

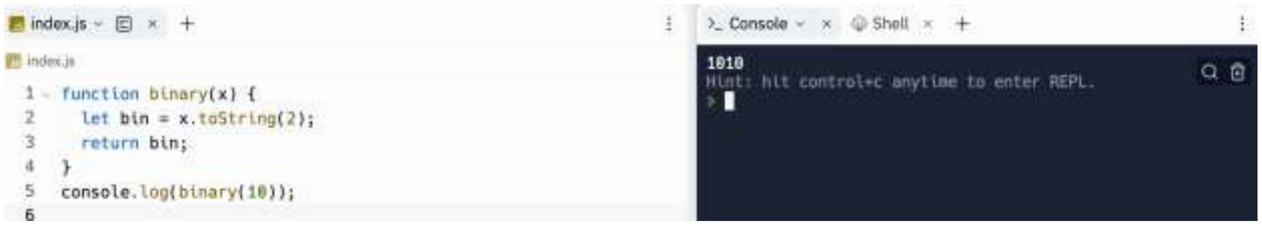
Create a function that returns a base-2 (binary) representation of a base-10 (decimal) string number. To convert is simple: ((2) means base-2 and (10) means base-10) 010101001(2) = 1 + 8 + 32 + 128.

Going from right to left, the value of the most right bit is 1, now from that every bit to the left will be x2. The values of an 8 bit binary number are (256, 128, 64, 32, 16, 8, 4, 2, 1).

Examples

```
binary(1) ➞ "1"

// 1*1 = 1
```

```
binary(5) ➞ "101"

// 1*1 + 1*4 = 5

binary(10) ➞ "1010"

// 1*2 + 1*8 = 10
```



```javascript
function binary(x) {
  let bin = x.toString(2);
  return bin;
}
console.log(binary(10));
```

```
1010
Hint: hit control+c anytime to enter REPL.
>
```

Notes

- Numbers will always be below 1024 (not including 1024).
- The `&&` operator could be useful.
- The strings will always go to the length at which the most left bit's value gets bigger than the number in `decimal`.
- If a binary conversion for `0` is attempted, return `"0"`.