

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
```

```
triArea(7, 4) → 14
```

```
triArea(10, 10) → 50
```

Notes

- The area of a triangle is: $(\text{base} * \text{height}) / 2$
- 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 nothing"
```

```
giveMeSomething("Bob Jane") → "something Bob Jane"
```

```
giveMeSomething("something") → "something something"
```

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
```

```
points(7, 5) → 29
```

```
points(38, 8) → 100
```

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
```

```
lessThan100(83, 34) → false
```

```
// 83 + 34 = 117
```

```
lessThan100(3, 77) → true
```

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

`addUp(13)` → 91

`addUp(600)` → 180300

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
```

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 (\ll):

$$10 \ll 3 = 10 * 2^3 = 10 * 8 = 80$$

$$-32 \ll 2 = -32 * 2^2 = -32 * 4 = -128$$

$$5 \ll 2 = 5 * 2^2 = 5 * 4 = 20$$

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

Examples

`shiftToLeft(5, 2) → 20`

`shiftToLeft(10, 3) → 80`

`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.

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 $\times 2$. 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
```

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"`.

