

EXAMPLE 33: UNDERSTANDING NaN

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NaN IS A SPECIAL VALUE THAT APPEARS
WHEN A NUMBER IS EXPECTED, BUT
SOMETHING UNEXPECTED OCCURS.

NaN IS A SPECIAL VALUE THAT APPEARS WHEN A NUMBER IS EXPECTED, BUT SOMETHING UNEXPECTED OCCURS.

USE THE `isNaN(x)` FUNCTION, NOT `x == NaN`

**THIS IS QUITE IMPORTANT - REMEMBER THIS,
ELSE WEIRD BUGS WILL OCCUR!**

USE THE **isNaN(x)** FUNCTION, NOT **x == NaN**

```
Is 123 NaN? : false
```

A LEGIT NUMBER IS OBVIOUSLY NOT NaN

```
Is <empty string> NaN? : false
```

```
Is undefined NaN? : true
```

```
Is null NaN? : false
```

```
Is 0/0 NaN? : true
```

```
Is The string 'NaN' NaN? : true
```

```
Is The value NaN NaN? : true
```

USE THE **isNaN(x)** FUNCTION, NOT **x == NaN**

```
Is 123 NaN? : false
```

```
Is '123' NaN? : false
```

```
Is Math.sqrt(-1) NaN? : true
```

A STRING THAT CAN BE CONVERTED TO A
NUMBER IS NOT **NaN** EITHER

```
Is undefined NaN? : true
```

```
Is null NaN? : false
```

```
Is 0/0 NaN? : true
```

```
Is The string 'NaN' NaN? : true
```

```
Is The value NaN NaN? : true
```

USE THE **isNaN(x)** FUNCTION, NOT **x == NaN**

```
Is 123 NaN? : false
```

```
Is '123' NaN? : false
```

```
Is Math.sqrt(-1) NaN? : true
```

**AHA! SQUARE ROOT OF A NEGATIVE NUMBER IS
MOST DEFINITELY NaN!**

```
Is null NaN? : false
```

```
Is 0/0 NaN? : true
```

```
Is The string 'NaN' NaN? : true
```

```
Is The value NaN NaN? : true
```

USE THE **isNaN(x)** FUNCTION, NOT **x == NaN**

```
Is 123 NaN? : false
```

```
Is '123' NaN? : false
```

```
Is Math.sqrt(-1) NaN? : true
```

```
Is 'Hello' NaN? : true
```

```
Is empty string NaN? : false
```

A STRING THAT CAN'T BE CONVERTED TO A
NUMBER IS **NaN** TOO!

```
Is 0/0 NaN? : true
```

```
Is The string 'NaN' NaN? : true
```

```
Is The value NaN NaN? : true
```

USE THE `isNaN(x)` FUNCTION, NOT `x == NaN`

```
Is 123 NaN? : false
```

```
Is '123' NaN? : false
```

```
Is Math.sqrt(-1) NaN? : true
```

```
Is 'Hello' NaN? : true
```

```
Is <empty string> NaN? : false
```

AN EMPTY STRING IS NOT NaN (BECAUSE IT CAN BE CONVERTED TO 0)

```
Is The string 'NaN' NaN? : true
```

```
Is The value NaN NaN? : true
```


USE THE **isNaN(x)** FUNCTION, NOT **x == NaN**

```
Is 123 NaN? : false
```

```
Is '123' NaN? : false
```

```
Is Math.sqrt(-1) NaN? : true
```

```
Is 'Hello' NaN? : true
```

```
Is <empty string> NaN? : false
```

```
Is undefined NaN? : true
```

undefined IS NaN.

```
Is The value NaN NaN? : true
```

USE THE `isNaN(x)` FUNCTION, NOT `x == NaN`

```
Is 123 NaN? : false
```

```
Is '123' NaN? : false
```

```
Is Math.sqrt(-1) NaN? : true
```

```
Is 'Hello' NaN? : true
```

```
Is <empty string> NaN? : false
```

```
Is undefined NaN? : true
```

```
Is null NaN? : false
```

**`null` IS NOT NaN, BECAUSE IT CAN BE
CONVERTED TO 0**

USE THE **isNaN(x)** FUNCTION, NOT **x == NaN**

```
Is 123 NaN? : false
```

```
Is '123' NaN? : false
```

```
Is Math.sqrt(-1) NaN? : true
```

```
Is 'Hello' NaN? : true
```

DIVISION BY ZERO! THIS IS NaN

```
Is 0/0 NaN? : true
```

```
Is The string 'NaN' NaN? : true
```

```
Is The value NaN NaN? : true
```

USE THE **isNaN(x)** FUNCTION, NOT **x == NaN**

```
Is 123 NaN? : false
```

```
Is '123' NaN? : false
```

```
Is Math.sqrt(-1) NaN? : true
```

```
Is 'Hello' NaN? : true
```

```
Is <empty string> NaN? : false
```

THE STRING **'NaN'** AND THE VALUE **NaN** ARE BOTH
NaN

```
Is The string 'NaN' NaN? : true
```

```
Is The value NaN NaN? : true
```

ITS IRONIC -

NaN STANDS FOR 'NOT A
NUMBER'

typeof NaN RETURNS - GUESS WHAT?

What is the type of NaN?

JAVASCRIPT QUIRKS

ARE ANNOYING WHEN YOU FIRST ENCOUNTER THEM,
BUT OVER TIME THEY BECOME AMUSING, EVEN

• • • • •
• **STRANGE SPECIAL** •
• **VALUES** •
• • • • •

STRANGE COMPARISON
OPERATORS

STRINGS AND
NUMBERS

TRUTHY AND
FALSEY

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STRANGE COMPARISON
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• • • • •
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• • • • •

TRUTHY AND
FALSEY