

[< Interactive Coding Exercises](#)

## Exercise 1 - Odd or Even

Overview

My Submissions/Test Runs

### Instructions

Write a program that works out whether if a given number is an odd or even number.

Even numbers can be divided by 2 with no remainder.

e.g. 86 is **even** because  $86 \div 2 = 43$

43 does not have any decimal places. Therefore the division is clean.

e.g. 59 is **odd** because  $59 \div 2 = 29.5$

29.5 is not a whole number, it has decimal places. Therefore there is a remainder of 0.5, so the division is not clean.

The **modulo** is written as a percentage sign (%) in Python. It gives you the remainder after a division.

e.g.

`6 ÷ 2 = 3` with no remainder.

therefore: `6 % 2 = 0`

$5 \div 2 = 2 \times 2 + 1$ , remainder is 1.

therefore: `5 % 2 = 1`

$14 \div 4 = 3 \times 4 + 2$ , remainder is 2.

therefore: `14 % 4 = 2`

**Warning** your output should match the Example Output format exactly, even the positions of the commas and full stops.

### Example Input 1

```
43
```

### Example Output 1

```
This is an odd number.
```

## Example Input 2

```
94
```

## Example Output 2

```
This is an even number.
```

e.g. When you hit **run**, this is what should happen:

```
Python 3.7.4 (default, Jul  9 2019, 00:06:43)
[GCC 6.3.0 20170516] on linux
```



## Hint

1. All even numbers can be divided by 2 with 0 remainder.
2. Try some using the modulo with some odd numbers e.g.

```
3 % 2
```

```
5 % 2
```

```
7 % 2
```

Then try using the modulo with some even numbers e.g.

```
4 % 2
```

```
6 % 2
```

```
8 % 2
```

See what's in common each time.

## Test Your Code

Check your code is doing what it is supposed to. When you're happy with your code, click submit to check your solution.

## Solution

<https://repl.it/@appbrewery/day-3-1-solution>

OPEN ASSIGNMENT WORKSPACE