

• Digits with Words

Write a **function** that receives a **digit** in the form of a **word** (as a **string**) and prints the **digit** (as a **number**).

Examples

Input	Output
'nine'	9
'two'	2
'zero'	0

Hints

- Use a **switch** case.

• Prime Number Checker

Write a **function** to check if a number is **prime** (only divisible by itself and one).

The **input** comes as a single number argument.

The **output** should be the return value of your function. Return **true** for prime number and **false** otherwise.

Examples

Input	Output
7	true
8	false
81	false

Hints

You can find more information about prime numbers: https://en.wikipedia.org/wiki/Prime_number

• Cone

Write a **function** to calculate a cone's **volume** and **total surface area** by given height and radius of the base.

The **input** comes as two number arguments. The first element is the cone's **radius** and the second is its **height**.

The **output** should be printed to the console on a **new line** for every result. The result should be formatted to the **fourth decimal point**.

Examples

Input	Output
3, 5	volume = 47.1239 area = 83.2298
3.3, 7.8	volume = 88.9511 area = 122.0159

Hints

You can use this online tool to check your results: <http://www.calculatorsoup.com/calculators/geometry-solids/cone.php>

• Biggest of 3 Numbers

Write a **function** that finds the **biggest number**.

The **input** comes as 3 parameters.

The **output** is the **biggest** of the input numbers.

Examples

Input	Output
-2, 7, 3	7
130, 5, 99	130
43, 43.2, 43.1	43.2
2, 2, 2	2

- **Binary to Decimal**

Write a **function** that reads an 8-bit binary number and converts it to a decimal.
The **input** comes as one string element, representing a binary number.
The **output** should be printed to the console.

Examples

Input	Output
00001001	9
11110000	240

- **Chess Board**

Write a **function** to print a chessboard of size **n X n**. See the example for more information.
The **input** comes as a single number argument **n**.
The **output** should be returned as a result of your function in the form of a string.

Examples

Input	Output
3	<pre><div class="chessboard"> <div> </div> <div> </div> <div> </div> </div></pre>

- **Triangle Area**

Write a **function** that calculates a **triangle's area** by its 3 sides.

The **input** comes as three number arguments, representing one **side** of a triangle.

The **output** should be printed to the console.

Examples

Input	Output
2, 3.5, 4	3.4994419197923547
3 5.5 4	5.854685623498498

Hints

- Use [Heron's formula](#) to obtain the result.