More Exercises: Data Types and Variables

Problems for exercise and homework for the "JS Fundamentals" Course @ SoftUni.
Submit your solutions in the SoftUni judge system at: https://judge.softuni.bg/Contests/1269

1. Digits with Words

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

Examples

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

Hints

Use a **switch** case.

2. Prime Number Checker

Write a **function** to check if a number is **prime** (only wholly 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

Input	Output
8	false

Input	Output
81	false

Hints

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

3. Cone

Write a **function** to calculate a cone's **volume** and **total surface area** by given height and radius at 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

Input	Output
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

4. Biggest of 3 Numbers

Write a **function** that finds the **biggest of 3 numbers**.

The **input** comes as 3 parameters.

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

Examples

Input	Output
-2, 7, 3	7

Input	Output
130, 5, 99	130

Input	Output
43, 43.2, 43.1	43.2

5. 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

Input	Output
11110000	240

6. 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	

7. 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	3.4994419198

Hints

Use Heron's formula to obtain the result.