**Module Introduction**

Write a program to take a 2d grid map of 1s (land) and 0s (water) as input, count and output the number of islands.

Problem Solving

**Objective**

Given a 2D map of '1's (land) and '0's (water), count the number of islands. An island is surrounded by water and is formed by connecting adjacent lands horizontally or vertically. You may assume all four edges of the grid are all surrounded by water.

Note: Diagonal connections don’t indicate connected land. Handle all non negative matrix sizes. For any error cases, print 0.

**Examples**

**Example 1**

Input:

**1111**0

**11**0**1**0

**11**000

00000

Output: 1

**Example 211**

Input:

**11**000

**11**000

00**1**00

000**11**

Output: 3