/algorithms in art and design

Code and Space
ARC 593 | DMS 606

Fall 2016
Instructor: Mark Shepard
TA: Leonardo Aranda

al·go·rithm

ˈalɡəˌriT͞Həm/

noun

a self-contained step-by-step set of operations to be performed

**Find the largest number in a list of numbers of random order**

High-level description:

1. If there are no numbers in the set then there is no highest number.
2. Assume the first number in the set is the largest number in the set.
3. For each remaining number in the set: if this number is larger than the current largest number, consider this number to be the largest number in the set.
4. When there are no numbers left in the set to iterate over, consider the current largest number to be the largest number of the set.

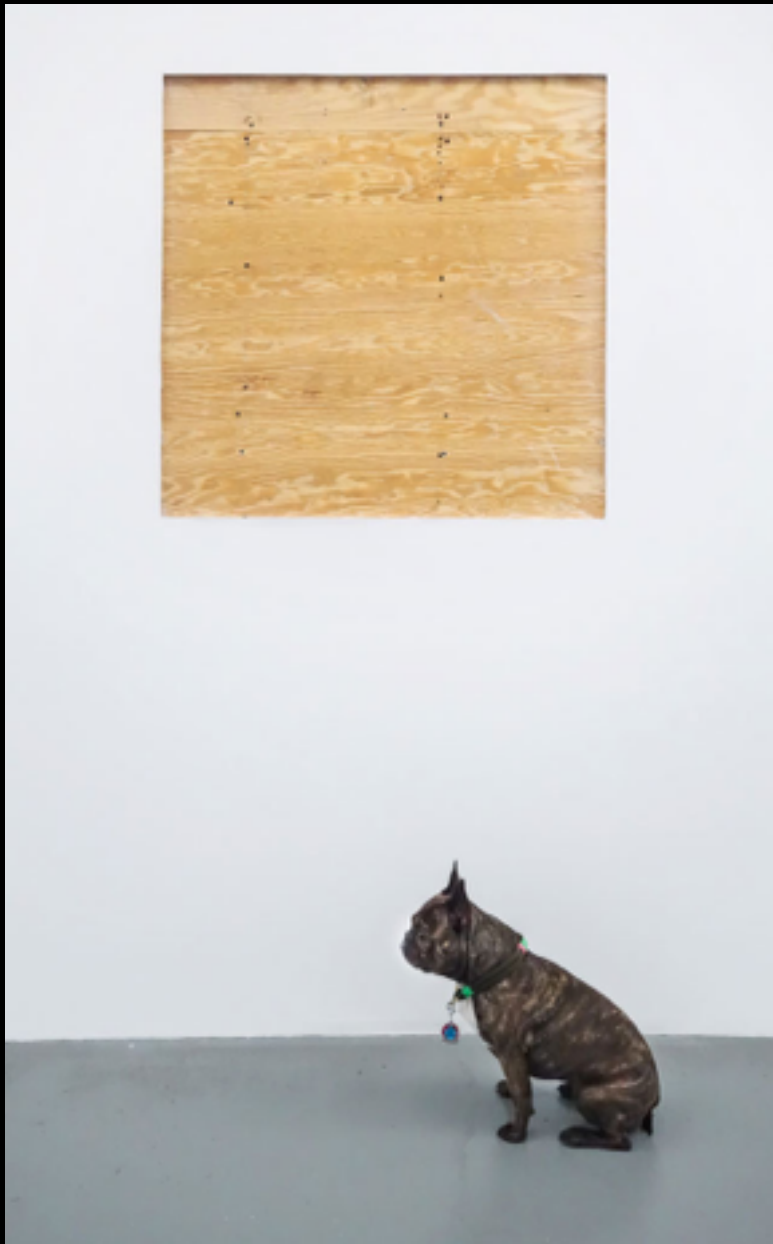# Find the largest number in a list of numbers of random order

Pseudocode:

```
if L.size = 0 return null
largest ← L[0]
for each item in L, do
  if item > largest, then
    largest ← item
return largest
```
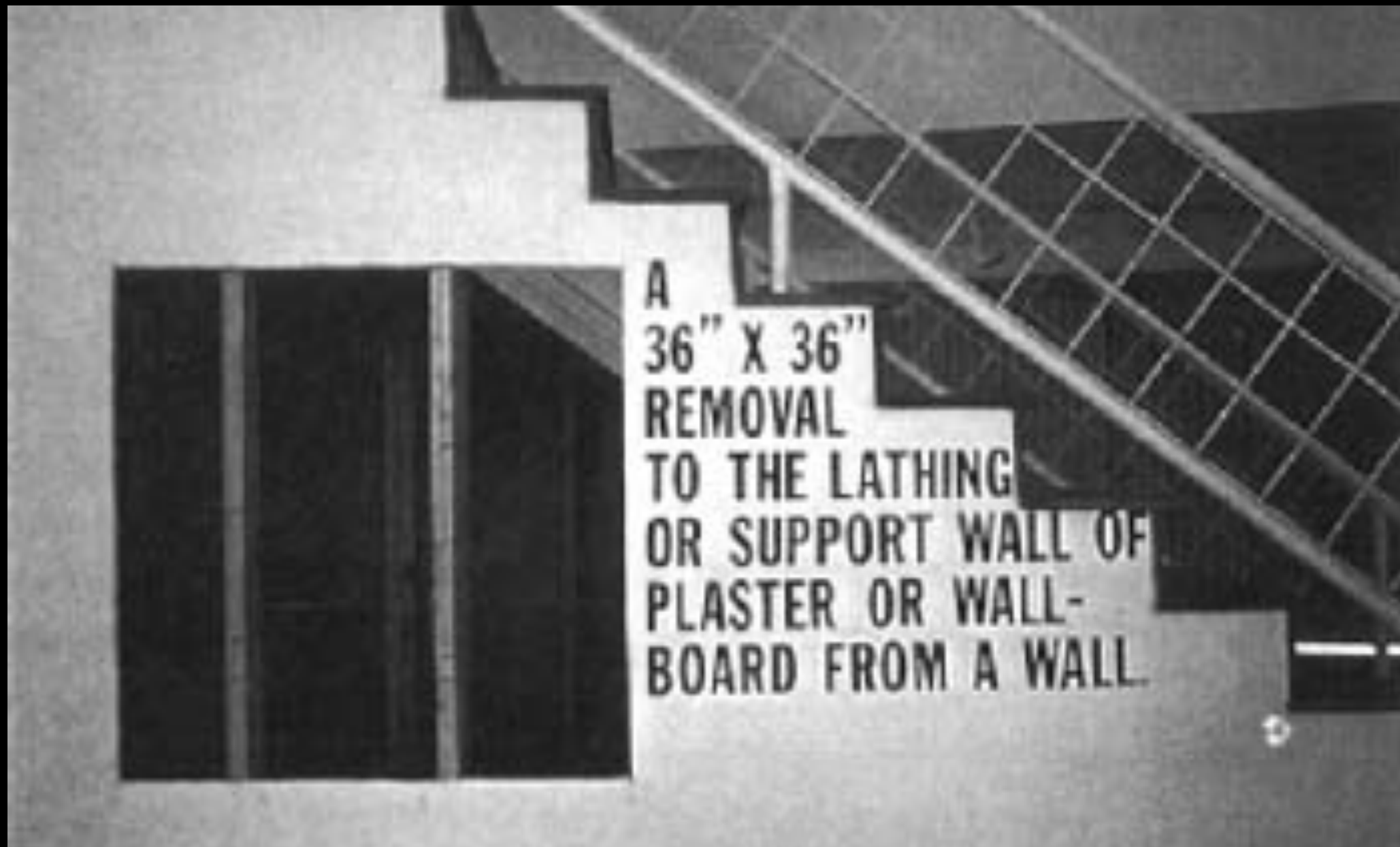
A 36" x 36" REMOVAL TO THE LATHING OR
SUPPORT WALL OF PLASTER OR WALL
BOARD FROM A WALL

Lawrence Weiner
1968

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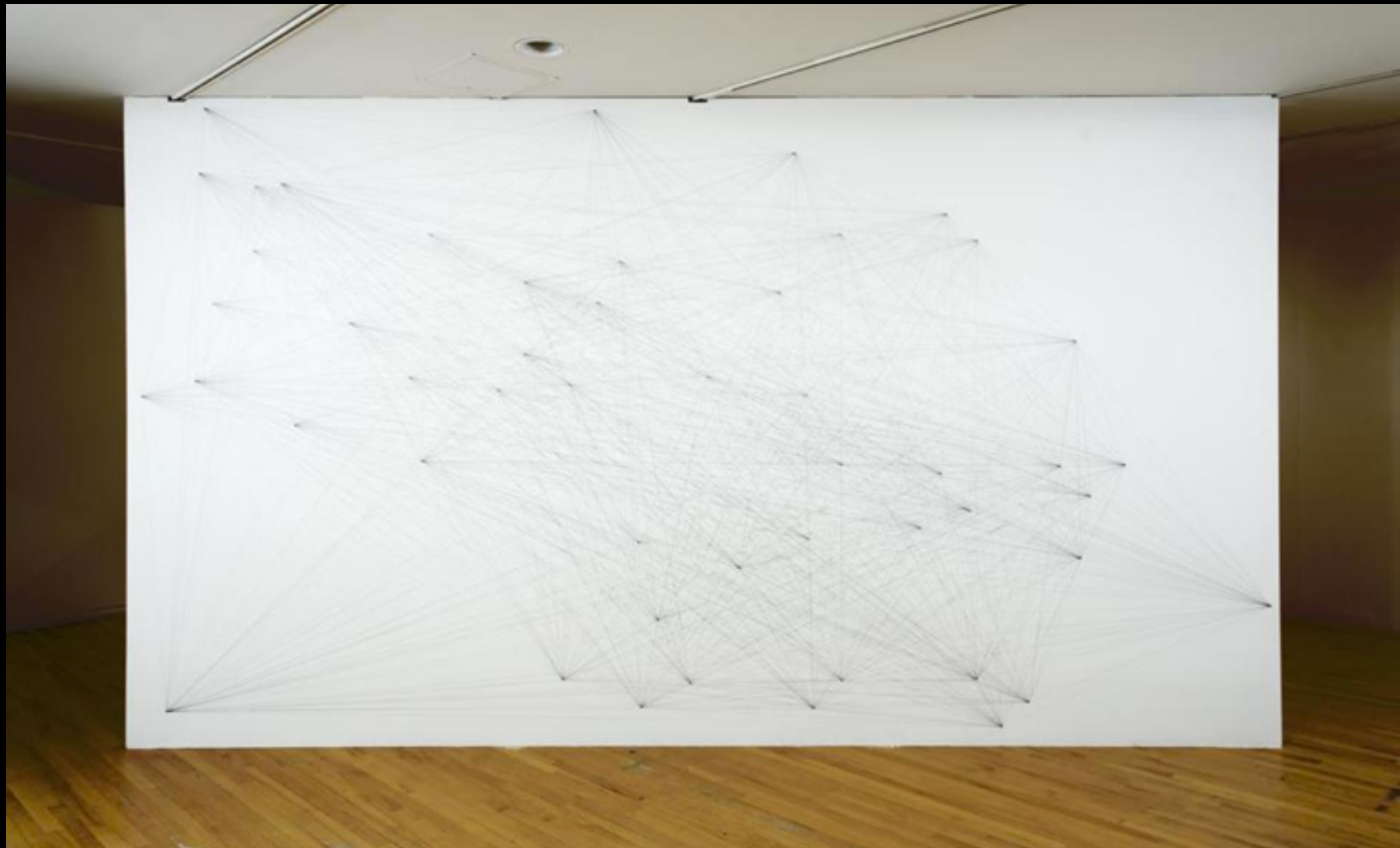1968

**WALL DRAWING
BOSTON MUSEUM**

On a wall surface, any

continuous stretch of wall,

using a hard pencil, place

fifty points at random.

The points should be evenly

distributed over the area

of the wall. All of the

points should be connected

by straight lines.

Wall Drawing #118

Sol Lewit
School of the Museum of Fine Arts (1971)

Wall Drawing #118

Sol Lewit
School of the Museum of Fine Arts (1971)

.dot walk

```
//Classic.walk
Repeat
[
1 st street left
2 nd street right
2 nd street left
]
```

```
// Interactive Generative Psychogeography
// Filename: interact1.walk
// This open source software is produced by
// www.socialfiction.org
//
// T = Time (in minutes)
// E = Exportcode
// C = Counter

E = 3
C = 0

Repeat

{

E = X

1 st  street left
2 nd street right
X     street left

When 2 programs meet

{

Exchange E

C + 1

}

Count T 0 to 60
If time = 60

{

abort to Root
print C to socialfiction.org

}

}
```

cf. city flows

Till Nagel & Christopher Pietsch
2015-2016

Traces

Dana Zelig
Bezalel Academy of Arts and Design, Jerusalem

Modular Lattice

Marius Watz
2012

GAD – RC4 / Computational design methodologies for large-scale 3D printing

Manuel Jimenez G. and Gilles Retsin
Bartlett School of Architecture

Avena+ Test Bed

Benedikt Groß
2013