# Lab 2

# Question 1:

In this lab, the input is a  $3\times3$  matrix, named A, and your program should output corresponding picture in a txt file. The input is also in a txt file named "input.txt"

Here are some samples:

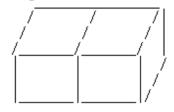
input1:

 $A = [0 \ 0 \ 0]$ 

 $0\ 1\ 1$ 

 $[0 \ 0 \ 0]$ 

output1:



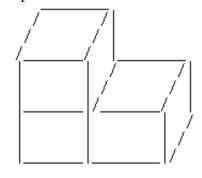
input2:

 $A = [0 \ 0 \ 0]$ 

 $0\ 2\ 1$ 

0 0 0]

output2:



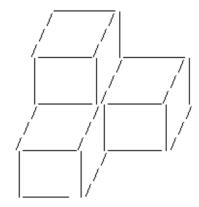
input3:

 $A = [0 \ 0 \ 0]$ 

0 2 1

 $0 \ 1 \ 0$ 

# output2:



The number in matrix A determines how many cubes should be located in the corresponding position.

Your cube can be different with my ugly cube, as long as it looks like a cube or parallelepiped.

The output should be stored in a txt file.

#### Goal 1:

Finish this problem when every elements in A less than or equal to 1.

## Goal 2:

Finish this problem when there are only disconnected cubes in the second layer.

## Goal 3:

Finish this problem when the elements in A is positive or 0.

#### Goal 4:

Finish this problem when the elements in A can be negative. Negative number means that there are some cubes under the first layer in this position.