

24-681 COMPUTER-AIDED DESIGN Spring 16

Carnegie Mellon University

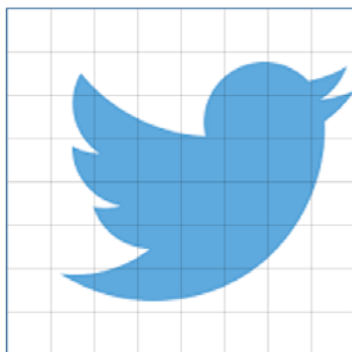
PROBLEM SET 11

Due: 4/21/2016 (Thu) 3:00PM @ DH A302
Issued: 4/12/2016 (Tue)
Weight: 3% of total grade
Note: * **Attach the last page of the problem set as the cover page of your paper.**

PS11-1 Quadtree

Make a quadtree of the geometry shown below. Note that the tree has four levels.

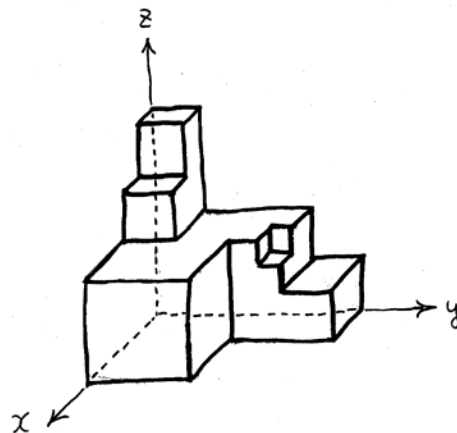
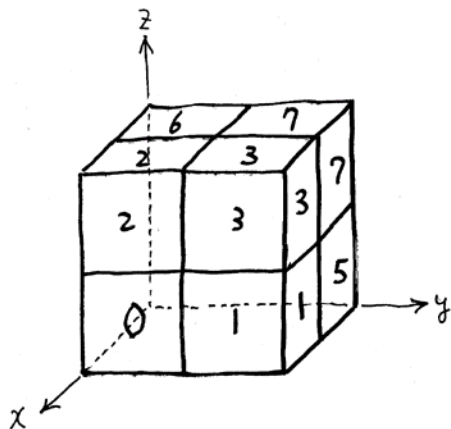
Use ■ for a full cell, □ for an empty cell, and ○ for a partially-full cell.



2	3
0	1

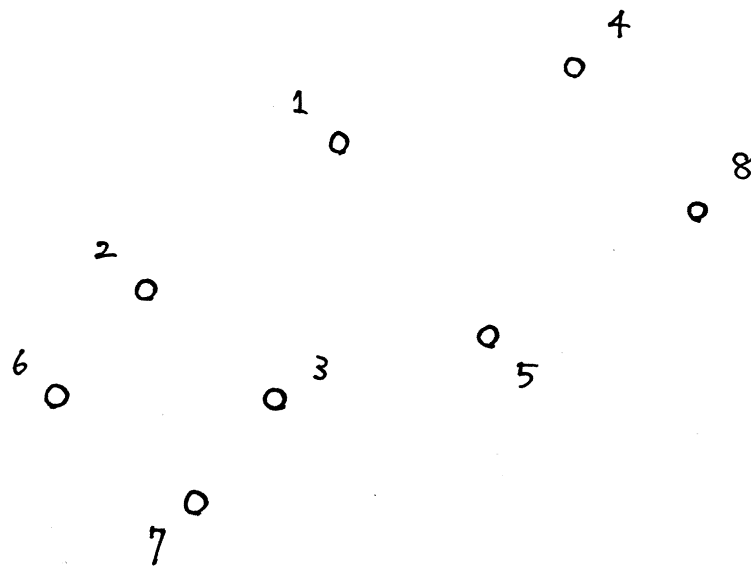
PS11-2 Octree

The left figure below shows the root cell of an octree. It also shows how octants are numbered. Write the octree of the geometry shown in the figure on the right-hand side. Use ■ for a full cell, □ for an empty cell, and ○ for a partially-full cell.

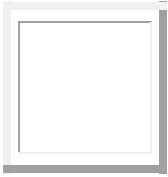


PS11-3 2D Tree

Mke a 2D tree for the six points show below.



PS11



The first letter of _____
your LAST name First Name Last Name

How many hours did you spend to complete this problem set?

_____ Hour(s)

How many no-penalty late days do you want to use for this problem set?

_____ Day(s)

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