

Quadtree implementation of 2D Point Set

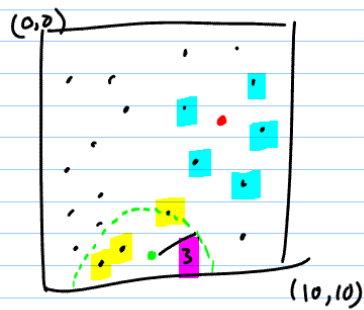
add (x, y)

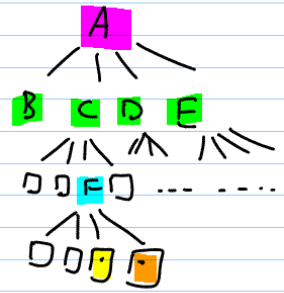
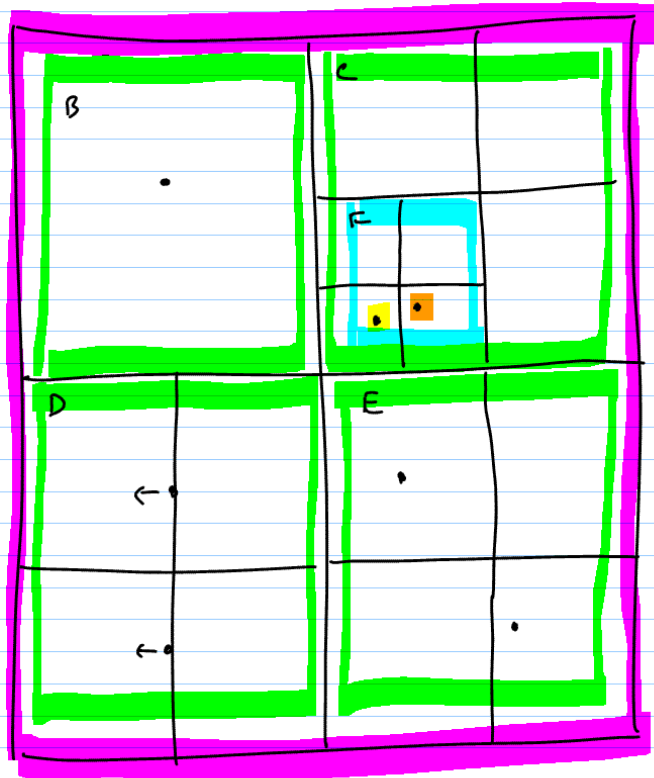
remove (x, y)

isMember (x, y)

findClosePoints (x, y, d) — find all points distance $< d$ from (x, y)

nearestNeighbors (x, y, k) — returns a list of k closest points to (x, y)





insert(x, y, n)

if (n is empty)
add (x, y) to n

else

make 4 children of n

put (x, y) from n in correct child and erase from
insert (x, y, whichever child is correct)

