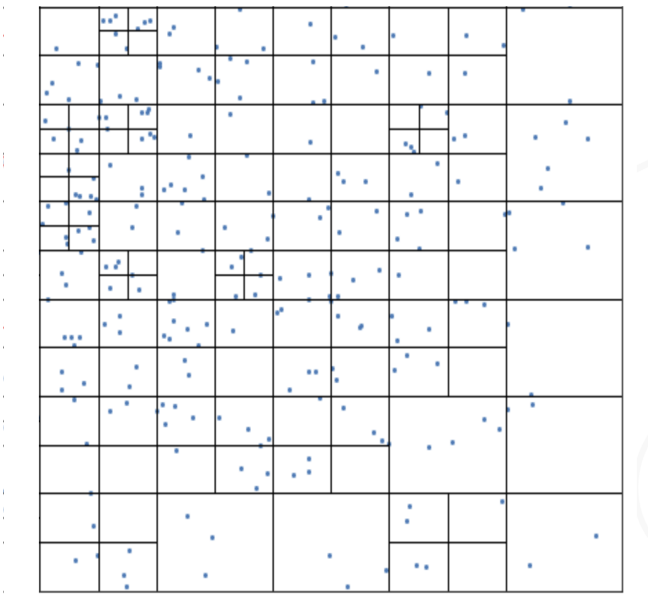
Sparse Quadtree

Implement a sparse quadtree data structure to store 2D points. No leaf node should contain more than NodeMaxPoints.



Store 100000 points drawn from some simulation in your sparse quadtree.
Implement a function that finds all points within a radius of a given position.

```
std::list<Point> QuadTree::FindInRadius(const Point& aPoint) const;
```

For comparison store the 100000 points in a std::vector<Point> and find the neighbours of a Point by brute force search. How much better is your quadtree FindInRadius compared to this vector search.