

MAX: total no of nodes
count-in: no of internal nodes
(= MAX * (1 - 0.9))

struct segment {
population (n)
boundary
} s;

algo:

declare root [MAX] // for allocation of nodes to segments

partition square into count-in segments

select internal nodes

connect internal nodes using Prim's Algorithm

for each node

nin = nearest internal node

Mark edge (node, nin) in T

partition:

init root[] as 0

s[0].n = MAX

s[0].boundary = unit square under consideration

for count-in - 1 times

Bubble the most populated segment i.e.

specify new boundaries

reallocate nodes as per new boundaries

select-in:

declare ax[count-in], ay[count-in]

iterate through root, store mean of ordinates in ax
~~store~~ mean of abscissae in ay

// s.t. (ax[i], ay[i]) represent centromost point of segment i

identify internal nodes in inds[count-in]

// s.t. node inds[i] is nearest pt to centromost point of the segment i

prim's - mst : (modification)

declare parent [count-in]

~~// st. parent[i]~~

// s.t. $wt(\text{parent}[i], i) = key[i]$

Mark edge $(\text{parent}[i], i)$ in T