Laufzeit voll

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| --- | --- |
| findClosestValue: | log(list.count) |
| getSpaceAround: | reg.duration\*streetLength + reg.length\*duration |
| findFreePositions: | streetLength\*(borderNum+reg.length\*reg.duration) |
| findBestPosition: | freePositions \*getSpaceAround |

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| --- | --- | --- |
|  | setRandomPositions | O(registrations.Count+registrations.Count^2) |
| setPos | |  |
|  | setPos(unsorted, randomPos) | registrations.Count+ registrations.Count\* (findFreePositions+reg.duration\*reg.length)  = registrations.Count\* streetLength\* (borderNum+ reg.length\*reg.duration)  = registrations.Count\* streetLength^2 \*reg.duration = registrations.Count\* 10^7 |
|  | setPos(unsorted, bestPos) | registrations.Count+ registrations.Count\* (findFreePositions +findBestPos+ reg.duration\*reg.length)  = registrations.Count\* (streetLength\*borderNum+ streetLength\*reg.length\*reg.duration+ freePositions \*(reg.duration\*streetLength + reg.length\*duration))  = registrations.Count\* streetLength (borderNum+ reg.length\*reg.duration+ freePositions \*duration) = registrations.Count\* streetLength^2 \*duration \* 3 = registrations.Count\* 30^7 |
|  | setPos(sorted, bestPos) | registrations.Count+ registrations.Count\*log(registrations.Count)+ registrations.Count\* (findFreePositions +findBestPos+ reg.duration\*reg.length)= registrations.Count+ registrations.Count\*log(registrations.Count)+ registrations.Count\* (streetLength\*(borderNum+reg.length\*reg.duration)+ freePositions \* (reg.duration\*streetLength + reg.length\*duration) + reg.duration\*reg.length)  = registrations.Count\*log(registrations.Count)+ registrations.Count\* (streetLength\*borderNum+ streetLength\*reg.length\*reg.duration+ freePositions \*( reg.duration\*streetLength + reg.length\*duration))  = registrations.Count\*log(registrations.Count)+ registrations.Count\*streetLength^2\*duration \* 3 = registrations.Count\*log(registrations.Count)+ registrations.Count\*30^7 |
| Simulate(move) | | registrations.Count+energy3+ runs\*(move+energy+cloneList+sumOverlap)= registrations.Count+ registrations.count^2+ runs\*(move+ 2\*registrations.Count + 2\*registrations.count^2 + registrations.Count\*borders)  = runs\*(move+ 2\*registrations.count^2 + registrations.Count\* streetLength) |
|  | + move2 | runs\*( streetLength^2+ streetLength \*reg.length\*reg.duration+ 2\*registrations.count^2) = runs\*(10^6+ 10^7+ registrations.count^2) |
|  | move | runs\*(2\*registrations.count^2 + registrations.Count\* streetLength) = runs\*(registrations.count^2 + registrations.Count\*10^3) |
| energy: | | registrations.Count + sumOverlap + registrations.Count\*borders= registrations.Count + registrations.count^2 + registrations.Count\*borders |
| move | |  |
|  | move: | registration.Count |
|  | move2: | findFreePositions+reg.length\*reg.duration+ log(freePositions.count)+registrations.Count = streetLength\*(borderNum+reg.length\*reg.duration)+reg.length\*reg.duration+ log(freePositions.count)+registrations.Count  = streetLength^2+ streetLength \*reg.length\*reg.duration+ log(streetLength)+registrations.Count |