

Dynamic vs Array

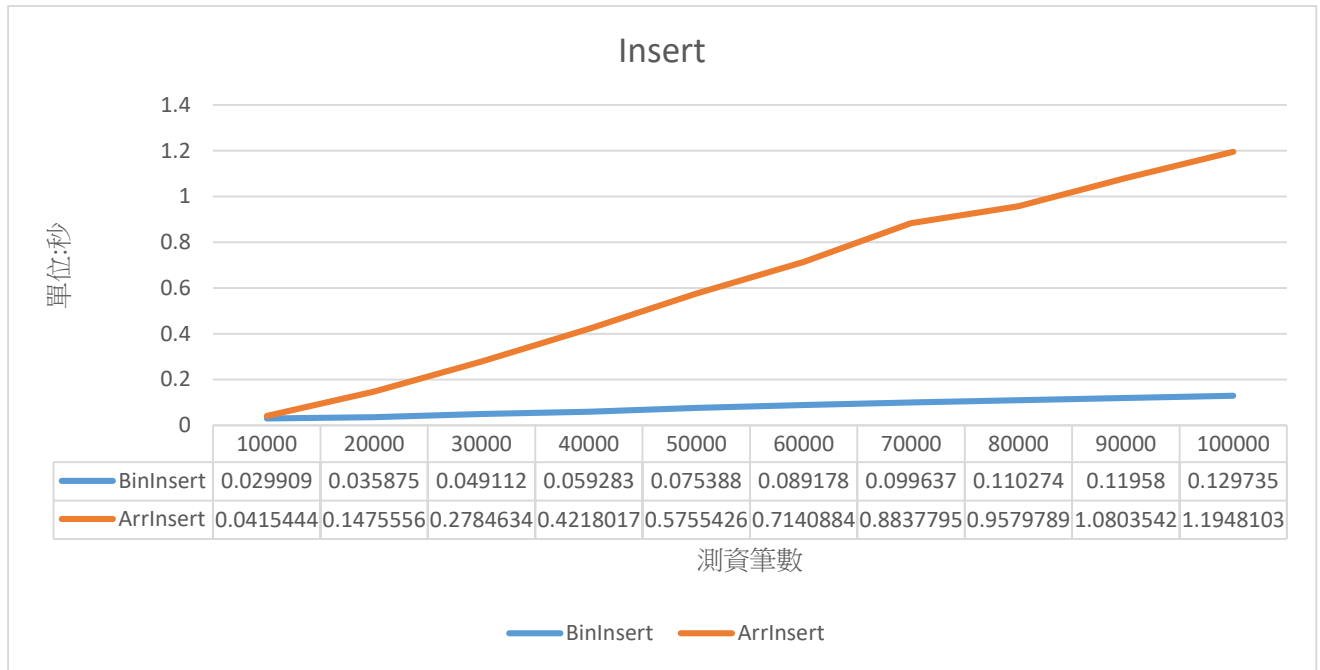
108502541 資工二 A 張凱博

Binary Insert

Lasting Time for 10000 inputs: 0.02990900
Lasting Time for 20000 inputs: 0.03587500
Lasting Time for 30000 inputs: 0.04911200
Lasting Time for 40000 inputs: 0.05928300
Lasting Time for 50000 inputs: 0.07538800
Lasting Time for 60000 inputs: 0.08917800
Lasting Time for 70000 inputs: 0.09963700
Lasting Time for 80000 inputs: 0.11027400
Lasting Time for 90000 inputs: 0.11958000
Lasting Time for 100000 inputs: 0.12973500

Array Insert

Lasting Time for 10000 inputs: 0.0415444
Lasting Time for 20000 inputs: 0.1475556
Lasting Time for 30000 inputs: 0.2784634
Lasting Time for 40000 inputs: 0.4218017
Lasting Time for 50000 inputs: 0.5755426
Lasting Time for 60000 inputs: 0.7140884
Lasting Time for 70000 inputs: 0.8837795
Lasting Time for 80000 inputs: 0.9579789
Lasting Time for 90000 inputs: 1.0803542
Lasting Time for 100000 inputs: 1.1948103

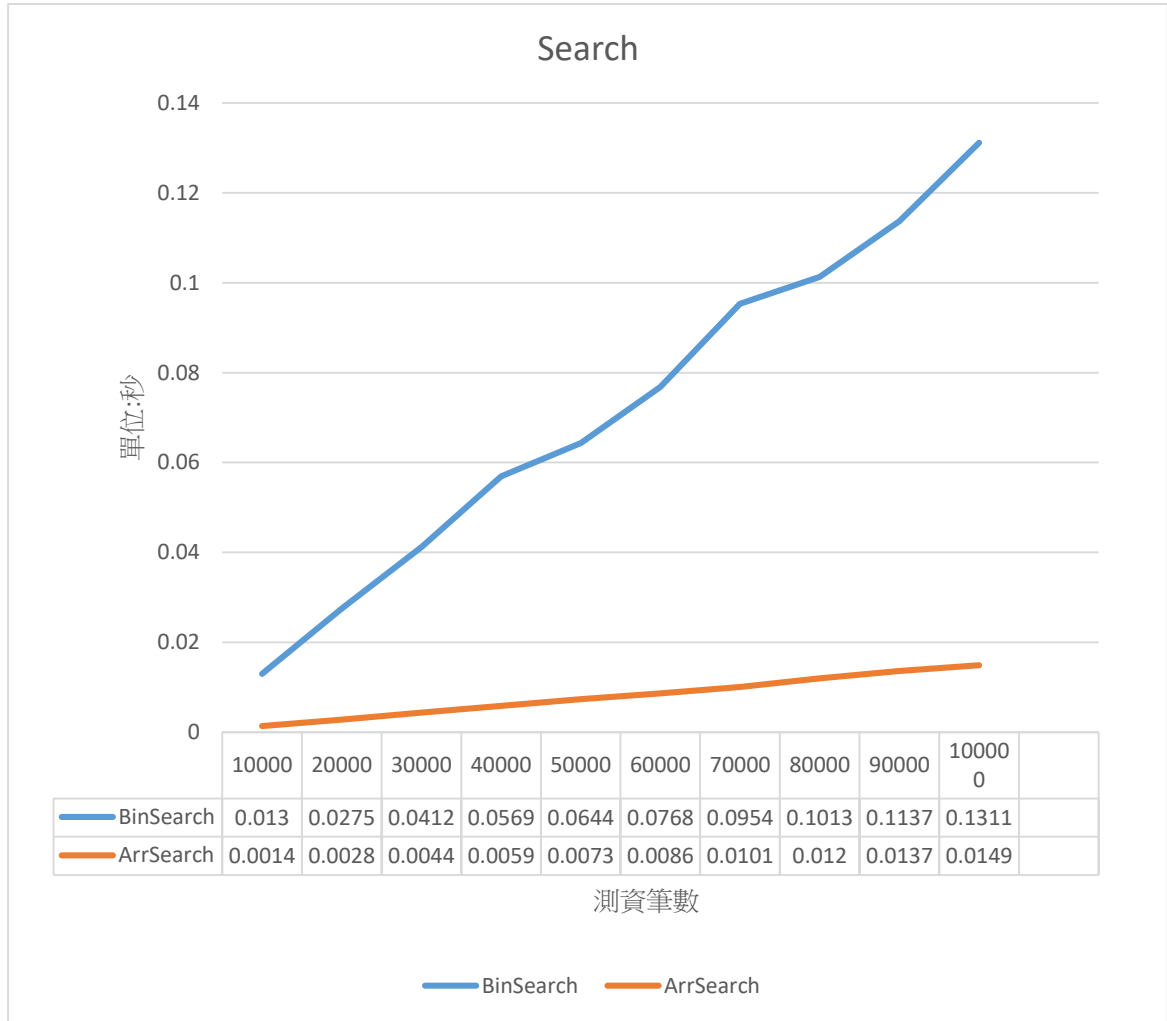


Binary search

Lasting Time for 10000 inputs: 0.012966
 Lasting Time for 20000 inputs: 0.027508
 Lasting Time for 30000 inputs: 0.041228
 Lasting Time for 40000 inputs: 0.056924
 Lasting Time for 50000 inputs: 0.064356
 Lasting Time for 60000 inputs: 0.076804
 Lasting Time for 70000 inputs: 0.095351
 Lasting Time for 80000 inputs: 0.101333
 Lasting Time for 90000 inputs: 0.113682
 Lasting Time for 100000 inputs: 0.131137

Array Search

Lasting Time for 10000 inputs: 0.001384
 Lasting Time for 20000 inputs: 0.002838
 Lasting Time for 30000 inputs: 0.004405
 Lasting Time for 40000 inputs: 0.005886
 Lasting Time for 50000 inputs: 0.007349
 Lasting Time for 60000 inputs: 0.008619
 Lasting Time for 70000 inputs: 0.010066
 Lasting Time for 80000 inputs: 0.012002
 Lasting Time for 90000 inputs: 0.013654
 Lasting Time for 100000 inputs: 0.014896



Not Insert

10000 : 1372

20000 : 5004

30000 : 10332

40000 : 16857

50000 : 24312

60000 : 32494

70000 : 41139

80000 : 50105

90000 : 59397

100000 : 68804