ÅRandom

(b) $\mathcal{O}(n)$

(c) $\mathcal{O}(\log n)$

(d) $\mathcal{O}(\log n)$

Linear

(b) avg $\mathcal{O}(n)$,worst $\mathcal{O}(n)$

(c) avg $\mathcal{O}(n)$,worst $\mathcal{O}(n)$

(d) avg $\mathcal{O}(\log n)$,worst $\mathcal{O}(n)$

Scramble

(b) avg $\mathcal{O}(n)$,worst $\mathcal{O}(n)$

(c) avg $\mathcal{O}(n)$,worst $\mathcal{O}(n)$

(d) avg $\mathcal{O}(\log n)$,worst $\mathcal{O}(n)$

The scramble search is the best

Scramble search performs best.

This is the result of running a sequence of 1000 random numbers for 1000 times.

```
Random average:  6.4232826232910l5e-05
Linear average:  0.034347291469573 97
Scramble average:  0.0008692293167114258
```