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PROBLEMS OUTPUT DEBUG CONSOLE <u>TERMINAL</u>

/usr/local/bin/python3 "/Users/peilinhe/Documents/MS Homework/Algorithm/Quiz12/Quiz12.py"

peilinhe@MacBookPro_M1Max Quiz12 % /usr/local/bin/python3 "/Users/peilinhe/Documents/MS Homework/Algorithm/Q

[-10, -9, 1, 2, 2, 2, 3, 3, 4, 6, 7, 9, 10, 13]

peilinhe@MacBookPro_M1Max Quiz12 %
```

Comparison:

Bubble Sort: $T(n) = (n-1)^2 \in O(n^2)$ Insertion Sort: $T(n) = n^2/2 \in O(n^2)$ Exchange Sort: $T(n) = n^2/2 \in O(n^2)$ Selection Sort: $T(n) = n^2/2 \in O(n^2)$

The time consumption of these four algorithms is the same, $O(n^2)$.