

1. $O(n^2)$ by sorting+monotone pointers.
2. [1].

lower bound: this problem is 3sum-hard. see 015. 3Sum.

References

- [1] Jesper Nederlof, Erik Jan van Leeuwen, and Ruben van der Zwaan. Reducing a target interval to a few exact queries. In *International Symposium on Mathematical Foundations of Computer Science*, pages 718–727. Springer, 2012.