

HackerEarth Online Judge

Prepared by: Mohamed Ayman

Algorithm Engineer at Valeo
Deep Learning Researcher and Teaching Assistant
at The American University in Cairo (AUC)
spring 2020





- sw.eng.MohamedAyman@gmail.com
- f facebook.com/cs.MohamedAyman
- in linkedin.com/in/cs-MohamedAyman
- github.com/cs-MohamedAyman

HackerEarth Online Judge - Phase 2 Algorithms Sorting

We will discuss in this lecture the following topics

1- Bubble & Selection & Insertion [15 problems]

2- Merge [25 problems]

3- Quick & Count & Heap [25 problems]

3





Section 1: Bubble & Selection & Insertion

Section 2: Merge

Section 3: Quick & Count & Heap



HackerEarth - Bubble & Selection & Insertion





- [01] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/min-max-difference/
- [02] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/sort-it-out/
- [03] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/pizza-confusion/
- [04] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/bubble-sort-15-8064c987/
- [05] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/shubham-and-xor-8526868e/
- [06] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/save-patients/
- [07] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/the-best-player-1/
- [08] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/balanced-partition-818edecd/
- [09] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/lexi-beads/
- [10] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/twisted-matrix/
- [11] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/kingdom-of-dreams/
- [12] https://www.hackerearth.com/practice/algorithms/sorting/bubble-sort/practice-problems/algorithm/benny-and-segments-marcheasy/
- [13] https://www.hackerearth.com/practice/algorithms/sorting/selection-sort/practice-problems/algorithm/old-keypad-in-a-foreign-land-24/
- [14] https://www.hackerearth.com/practice/algorithms/sorting/insertion-sort/practice-problems/algorithm/the-rise-of-the-weird-things-1/







✓ Section 1: Bubble & Selection & Insertion

Section 2: Merge

Section 3: Quick & Count & Heap



HackerEarth - Merge





- [01] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/i-think-its-easy/
- [02] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/pebbles-game-1/
- [03] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/median-game-june-easy-19-3722be60/
- [04] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/chandu-and-his-girlfriend-returns/
- [05] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/criminals-little-deepu-and-little-kuldeep/
- [06] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/chandu-and-his-girlfriend/
- [07] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/jumbled-queries-afb23321/
- [08] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/cheap-thrills/
- [09] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/help-natsu/
- [10] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/alice-and-marks-hsbc-b18d5d01/
- [11] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/pro-and-con-list/
- [12] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/sum-of-sum-of-digits-6/
- [13] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/shil-and-lucky-string-1/
- [14] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/maximum-sum-of-building-speed-00ab8996/
- [15] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/game-of-strengths-4/
- [16] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/monks-school-4/
- [17] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/puchi-and-luggage/
- [18] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/missing-soldiers-december-easy-easy/

HackerEarth - Merge





- [19] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/match-makers/
- [20] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/approximate/write-a-checker/
- [21] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/scoring-in-exam-1/
- [22] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/overtakes-count-33746e3a/
- [23] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/altf4-and-the-beetles/
- [24] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/sherlock-and-magic/
- [25] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/the-sorted-array/
- [26] https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/fredo-and-sums-1-605205cd/





✓ Section 1: Bubble & Selection & Insertion

✓ Section 2: Merge

Section 3: Quick & Count & Heap



HackerEarth - Quick & Count & Heap





- [01] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/grovyle-string/
- [02] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/lex-finds-beauty-0d0bc1b6/
- [03] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/prom-night/
- [04] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/k-palindrome-2c183be7/
- [05] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/card-game-1-44e9f4e7/
- [06] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/increasing-subsequence-fbb63e3c/
- [07] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/gotta-catch-em-all/
- [08] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/snake-b0112afa/
- [09] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/yet-to-keep-6f89250c/
- [10] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/biggest-cake-possible-6d5915e7/
- [11] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/benny-and-gifts-marcheasy-3/
- [12] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/earthandthemeteorites-qualifier2/
- [13] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/rank-list/
- [14] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/noor-and-his-pond-760eabe0/
- [15] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/one-sized-game/
- [16] https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/beautiful-strings-10/
- [17] https://www.hackerearth.com/practice/algorithms/sorting/counting-sort/practice-problems/algorithm/shil-and-birthday-present/
- [18] https://www.hackerearth.com/practice/algorithms/sorting/counting-sort/practice-problems/algorithm/finding-pairs-4/

HackerEarth - Quick & Count & Heap





- [19] https://www.hackerearth.com/practice/algorithms/sorting/heap-sort/practice-problems/algorithm/raghu-vs-sayan/
- [20] https://www.hackerearth.com/practice/algorithms/sorting/heap-sort/practice-problems/algorithm/cube-change-qualifier2/
- [21] https://www.hackerearth.com/practice/algorithms/sorting/heap-sort/practice-problems/algorithm/divide-apples/
- [22] https://www.hackerearth.com/practice/algorithms/sorting/heap-sort/practice-problems/algorithm/chandu-and-chandnis-secret-chat/
- [23] https://www.hackerearth.com/practice/algorithms/sorting/bucket-sort/practice-problems/algorithm/sort-the-array-5/





- ✓ Section 1: Bubble & Selection & Insertion
- ✓ Section 2: Merge
- ✓ Section 3: Quick & Count & Heap



