HackerRank Online Judge

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HackerRank Online Judge - Phase 3
Algorithms Basics

Lecture Agenda

We will discuss in this lecture the following topics

1- Warm-up [10 problems]

2- Recursion [10 problems]

3- Sorting [15 problems]

4- Search [25 problems]

5- Implementation [65 problems]


Let's
START UP

Lecture Agenda

Section 1: Warm-up

Section 2: Recursion

Section 3: Sorting

Section 4: Search

Section 5: Implementation

HackerRank - Warm-up

[01] https://www.hackerrank.com/challenges/simple-array-sum/problem
[02] https://www.hackerrank.com/challenges/compare-the-triplets/problem
[03] https://www.hackerrank.com/challenges/a-very-big-sum/problem
[04] https://www.hackerrank.com/challenges/diagonal-difference/problem
[05] https://www.hackerrank.com/challenges/plus-minus/problem
[06] https://www.hackerrank.com/challenges/staircase/problem
[07] https://www.hackerrank.com/challenges/mini-max-sum/problem
[08] https://www.hackerrank.com/challenges/birthday-cake-candles/problem
[09] https://www.hackerrank.com/challenges/time-conversion/problem

Lecture Agenda

- ✔ Section 1: Warm-up
- **Section 2: Recursion**
- Section 3: Sorting
- Section 4: Search
- Section 5: Implementation

HackerRank - Recursion

[01] https://www.hackerrank.com/challenges/the-power-sum/problem
[02] https://www.hackerrank.com/challenges/crossword-puzzle/problem
[03] https://www.hackerrank.com/challenges/recursive-digit-sum/problem
[04] https://www.hackerrank.com/challenges/simplified-chess-engine/problem
[05] https://www.hackerrank.com/challenges/password-cracker/problem
[06] https://www.hackerrank.com/challenges/stone-division-2/problem
[07] https://www.hackerrank.com/challenges/arithmetic-expressions/problem
[08] https://www.hackerrank.com/challenges/k-factorization/problem
[09] https://www.hackerrank.com/challenges/bowling-pins/problem
[10] https://www.hackerrank.com/challenges/simplified-chess-engine-ii/problem
[11] https://www.hackerrank.com/challenges/repeat-k-sums/problem

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- ✔ Section 1: Warm-up
- ✔ Section 2: Recursion
- **Section 3: Sorting**
- Section 4: Search
- Section 5: Implementation

HackerRank - Sorting

[01] https://www.hackerrank.com/challenges/big-sorting/problem
[02] https://www.hackerrank.com/challenges/tutorial-intro/problem
[03] https://www.hackerrank.com/challenges/insertionsort1/problem
[04] https://www.hackerrank.com/challenges/insertionsort2/problem
[05] https://www.hackerrank.com/challenges/correctness-invariant/problem
[06] https://www.hackerrank.com/challenges/runningtime/problem
[07] https://www.hackerrank.com/challenges/quicksort1/problem
[08] https://www.hackerrank.com/challenges/countingsort1/problem
[09] https://www.hackerrank.com/challenges/countingsort2/problem
[10] https://www.hackerrank.com/challenges/closest-numbers/problem
[11] https://www.hackerrank.com/challenges/find-the-median/problem
[12] https://www.hackerrank.com/challenges/countingsort4/problem
[13] https://www.hackerrank.com/challenges/fraudulent-activity-notifications/problem
[14] https://www.hackerrank.com/challenges/lilys-homework/problem
[15] https://www.hackerrank.com/challenges/insertion-sort/problem

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- ✔ Section 1: Warm-up
- ✔ Section 2: Recursion
- ✔ Section 3: Sorting
- **Section 4: Search**
- Section 5: Implementation

HackerRank - Search

[01] https://www.hackerrank.com/challenges/icecream-parlor/problem
[02] https://www.hackerrank.com/challenges/missing-numbers/problem
[03] https://www.hackerrank.com/challenges/sherlock-and-array/problem
[04] https://www.hackerrank.com/challenges/hackerland-radio-transmitters/problem
[05] https://www.hackerrank.com/challenges/gridland-metro/problem
[06] https://www.hackerrank.com/challenges/knightl-on-chessboard/problem
[07] https://www.hackerrank.com/challenges/minimum-loss/problem
[08] https://www.hackerrank.com/challenges/pairs/problem
[09] https://www.hackerrank.com/challenges/connected-cell-in-a-grid/problem
[10] https://www.hackerrank.com/challenges/short-palindrome/problem
[11] https://www.hackerrank.com/challenges/count-luck/problem
[12] https://www.hackerrank.com/challenges/cut-the-tree/problem
[13] https://www.hackerrank.com/challenges/gena/problem
[14] https://www.hackerrank.com/challenges/xor-quadruples/problem
[15] https://www.hackerrank.com/challenges/red-knights-shortest-path/problem
[16] https://www.hackerrank.com/challenges/maximum-subarray-sum/problem

HackerRank - Search

[17] https://www.hackerrank.com/challenges/maximizing-mission-points/problem

[18] https://www.hackerrank.com/challenges/making-candies/problem

[19] https://www.hackerrank.com/challenges/bike-racers/problem

[20] https://www.hackerrank.com/challenges/playing-with-numbers/problem

[21] https://www.hackerrank.com/challenges/sorted-subsegments/problem

[22] https://www.hackerrank.com/challenges/king-richards-knights/problem

[23] https://www.hackerrank.com/challenges/task-scheduling/problem

[24] https://www.hackerrank.com/challenges/similarpair/problem

[25] https://www.hackerrank.com/challenges/almost-integer-rock-garden

[26] https://www.hackerrank.com/challenges/distant-pairs/problem

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- ✔ Section 2: Recursion
- ✔ Section 3: Sorting
- ✔ Section 4: Search

Section 5: Implementation

HackerRank - Implementation

[01] https://www.hackerrank.com/challenges/grading/problem
[02] https://www.hackerrank.com/challenges/apple-and-orange/problem
[03] https://www.hackerrank.com/challenges/kangaroo/problem
[04] https://www.hackerrank.com/challenges/between-two-sets/problem
[05] https://www.hackerrank.com/challenges/breaking-best-and-worst-records/problem
[06] https://www.hackerrank.com/challenges/the-birthday-bar/problem
[07] https://www.hackerrank.com/challenges/divisible-sum-pairs/problem
[08] https://www.hackerrank.com/challenges/migratory-birds/problem
[09] https://www.hackerrank.com/challenges/day-of-the-programmer/problem
[10] https://www.hackerrank.com/challenges/bon-appetit/problem
[11] https://www.hackerrank.com/challenges/sock-merchant/problem
[12] https://www.hackerrank.com/challenges/drawing-book/problem
[13] https://www.hackerrank.com/challenges/counting-valleys/problem
[14] https://www.hackerrank.com/challenges/electronics-shop/problem
[15] https://www.hackerrank.com/challenges/cats-and-a-mouse/problem
[16] https://www.hackerrank.com/challenges/counting-valleys/problem

HackerRank - Implementation

[17] https://www.hackerrank.com/challenges/the-hurdle-race/problem
[18] https://www.hackerrank.com/challenges/designer-pdf-viewer/problem
[19] https://www.hackerrank.com/challenges/utopian-tree/problem
[20] https://www.hackerrank.com/challenges/angry-professor/problem
[21] https://www.hackerrank.com/challenges/beautiful-days-at-the-movies/problem
[22] https://www.hackerrank.com/challenges/strange-advertising/problem
[23] https://www.hackerrank.com/challenges/save-the-prisoner/problem
[24] https://www.hackerrank.com/challenges/circular-array-rotation/problem
[25] https://www.hackerrank.com/challenges/permutation-equation/problem
[26] https://www.hackerrank.com/challenges/jumping-on-the-clouds-revisited/problem
[27] https://www.hackerrank.com/challenges/find-digits/problem
[28] https://www.hackerrank.com/challenges/append-and-delete/problem
[29] https://www.hackerrank.com/challenges/sherlock-and-squares/problem
[30] https://www.hackerrank.com/challenges/library-fine/problem
[31] https://www.hackerrank.com/challenges/cut-the-sticks/problem
[32] https://www.hackerrank.com/challenges/repeated-string/problem

HackerRank - Implementation

[33] https://www.hackerrank.com/challenges/jumping-on-the-clouds/problem
[34] https://www.hackerrank.com/challenges/equality-in-a-array/problem
[35] https://www.hackerrank.com/challenges/acm-icpc-team/problem
[36] https://www.hackerrank.com/challenges/taum-and-bday/problem
[37] https://www.hackerrank.com/challenges/bigger-is-greater/problem
[38] https://www.hackerrank.com/challenges/minimum-distances/problem
[39] https://www.hackerrank.com/challenges/halloween-sale/problem
[40] https://www.hackerrank.com/challenges/bigger-is-greater/problem
[41] https://www.hackerrank.com/challenges/kaprekar-numbers/problem
[42] https://www.hackerrank.com/challenges/beautiful-triplets/problem
[43] https://www.hackerrank.com/challenges/flatland-space-stations/problem
[44] https://www.hackerrank.com/challenges/fair-rations/problem
[45] https://www.hackerrank.com/challenges/cavity-map/problem
[46] https://www.hackerrank.com/challenges/manasa-and-stones/problem
[47] https://www.hackerrank.com/challenges/manasa-and-stones/problem
[48] https://www.hackerrank.com/challenges/the-grid-search/problem

HackerRank - Implementation

[49] https://www.hackerrank.com/challenges/magic-square-forming/problem
[50] https://www.hackerrank.com/challenges/climbing-the-leaderboard/problem
[51] https://www.hackerrank.com/challenges/extra-long-factorials/problem
[52] https://www.hackerrank.com/challenges/non-divisible-subset/problem
[53] https://www.hackerrank.com/challenges/queens-attack-2/problem
[54] https://www.hackerrank.com/challenges/organizing-containers-of-balls/problem
[55] https://www.hackerrank.com/challenges/encryption/problem
[56] https://www.hackerrank.com/challenges/bigger-is-greater/problem
[57] https://www.hackerrank.com/challenges/the-time-in-words/problem
[58] https://www.hackerrank.com/challenges/the-grid-search/problem
[59] https://www.hackerrank.com/challenges/3d-surface-area/problem
[60] https://www.hackerrank.com/challenges/absolute-permutation/problem
[61] https://www.hackerrank.com/challenges/bomber-man/problem
[62] https://www.hackerrank.com/challenges/two-pluses/problem
[63] https://www.hackerrank.com/challenges/larrys-array/problem
[64] https://www.hackerrank.com/challenges/almost-sorted/problem

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