



HackerRank Online Judge

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HackerRank Online Judge - Phase 3

Algorithms Graph-Greedy-String



Lecture Agenda

We will discuss in this lecture
the following topics

1- Graph Theory

[65 problems]

2- Greedy

[25 problems]

3- Strings

[50 problems]



Let's
STARTUP

Lecture Agenda

Section 1: Graph Theory

Section 2: Greedy

Section 3: Strings



HackerRank - Graph Theory



- [01] <https://www.hackerrank.com/challenges/torque-and-development/problem>
- [02] <https://www.hackerrank.com/challenges/journey-to-the-moon/problem>
- [03] <https://www.hackerrank.com/challenges/synchronous-shopping/problem>
- [04] <https://www.hackerrank.com/challenges/bfsshortreach/problem>
- [05] <https://www.hackerrank.com/challenges/kruskalmstrsub/problem>
- [06] <https://www.hackerrank.com/challenges/even-tree/problem>
- [07] <https://www.hackerrank.com/challenges/the-quickest-way-up/problem>
- [08] <https://www.hackerrank.com/challenges/the-story-of-a-tree/problem>
- [09] <https://www.hackerrank.com/challenges/primsmstsub/problem>
- [10] <https://www.hackerrank.com/challenges/clique/problem>
- [11] <https://www.hackerrank.com/challenges/beautiful-path/problem>
- [12] <https://www.hackerrank.com/challenges/jack-goes-to-rapture/problem>
- [13] <https://www.hackerrank.com/challenges/crab-graphs/problem>
- [14] <https://www.hackerrank.com/challenges/jeanies-route/problem>
- [15] <https://www.hackerrank.com/challenges/johnland/problem>
- [16] <https://www.hackerrank.com/challenges/rust-murderer/problem>

HackerRank - Graph Theory



- [17] <https://www.hackerrank.com/challenges/frog-in-maze/problem>
- [18] <https://www.hackerrank.com/challenges/subset-component/problem>
- [19] <https://www.hackerrank.com/challenges/dijkstrashortreach/problem>
- [20] <https://www.hackerrank.com/challenges/toll-cost-digits/problem>
- [21] <https://www.hackerrank.com/challenges/real-estate-broker/problem>
- [22] <https://www.hackerrank.com/challenges/borrowing-money/problem>
- [23] <https://www.hackerrank.com/challenges/value-of-friendship/problem>
- [24] <https://www.hackerrank.com/challenges/floyd-city-of-blinding-lights/problem>
- [25] <https://www.hackerrank.com/challenges/kingdom-connectivity/problem>
- [26] <https://www.hackerrank.com/challenges/computer-game/problem>
- [27] <https://www.hackerrank.com/challenges/problem-solving/problem>
- [28] <https://www.hackerrank.com/challenges/journey-scheduling/problem>
- [29] <https://www.hackerrank.com/challenges/matrix/problem>
- [30] <https://www.hackerrank.com/challenges/episode-recording/problem>
- [31] <https://www.hackerrank.com/challenges/repair-roads/problem>
- [32] <https://www.hackerrank.com/challenges/kth-ancestor/problem>

HackerRank - Graph Theory



- [33] <https://www.hackerrank.com/challenges/journey-scheduling/problem>
- [34] <https://www.hackerrank.com/challenges/matrix/problem>
- [35] <https://www.hackerrank.com/challenges/episode-recording/problem>
- [36] <https://www.hackerrank.com/challenges/bytelandian-tours/problem>
- [37] <https://www.hackerrank.com/challenges/savita-and-friends/problem>
- [38] <https://www.hackerrank.com/challenges/tripartite-matching/problem>
- [39] <https://www.hackerrank.com/challenges/missile-defend/problem>
- [40] <https://www.hackerrank.com/challenges/training-the-army/problem>
- [41] <https://www.hackerrank.com/challenges/jim-and-his-lan-party/problem>
- [42] <https://www.hackerrank.com/challenges/travel-in-hackerland/problem>
- [43] <https://www.hackerrank.com/challenges/beadornaments/problem>
- [44] <https://www.hackerrank.com/challenges/liars/problem>
- [45] <https://www.hackerrank.com/challenges/jumping-rooks/problem>
- [46] <https://www.hackerrank.com/challenges/favourite-sequence/problem>
- [47] <https://www.hackerrank.com/challenges/cat-jogging/problem>
- [48] <https://www.hackerrank.com/challenges/quadrant-queries/problem>

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- [49] <https://www.hackerrank.com/challenges/tree-splitting/problem>
- [50] <https://www.hackerrank.com/challenges/coprime-paths/problem>
- [51] <https://www.hackerrank.com/challenges/minimum-mst-graph/problem>
- [52] <https://www.hackerrank.com/challenges/dag-queries/problem>
- [53] <https://www.hackerrank.com/challenges/huarongdao/problem>
- [54] <https://www.hackerrank.com/challenges/alex-vs-fedor/problem>
- [55] <https://www.hackerrank.com/challenges/vertical-paths/problem>
- [56] <https://www.hackerrank.com/challenges/drive/problem>
- [57] <https://www.hackerrank.com/challenges/tsp-grid/problem>
- [58] <https://www.hackerrank.com/challenges/road-network/problem>
- [59] <https://www.hackerrank.com/challenges/going-office/problem>
- [60] <https://www.hackerrank.com/challenges/ticket/problem>
- [61] <https://www.hackerrank.com/challenges/dfs-edges/problem>
- [62] <https://www.hackerrank.com/challenges/diameter-minimization/problem>
- [63] <https://www.hackerrank.com/challenges/airports/problem>
- [64] <https://www.hackerrank.com/challenges/definite-random-walks/problem>



Lecture Agenda

✓ Section 1: Graph Theory

Section 2: Greedy

Section 3: Strings



HackerRank - Greedy



- [01] <https://www.hackerrank.com/challenges/minimum-absolute-difference-in-an-array/problem>
- [02] <https://www.hackerrank.com/challenges/marcs-cakewalk/problem>
- [03] <https://www.hackerrank.com/challenges/grid-challenge/problem>
- [04] <https://www.hackerrank.com/challenges/luck-balance/problem>
- [05] <https://www.hackerrank.com/challenges/maximum-perimeter-triangle/problem>
- [06] <https://www.hackerrank.com/challenges/beautiful-pairs/problem>
- [07] <https://www.hackerrank.com/challenges/sherlock-and-the-beast/problem>
- [08] <https://www.hackerrank.com/challenges/priyanka-and-toys/problem>
- [09] <https://www.hackerrank.com/challenges/largest-permutation/problem>
- [10] <https://www.hackerrank.com/challenges/mark-and-toys/problem>
- [11] <https://www.hackerrank.com/challenges/jim-and-the-orders/problem>
- [12] <https://www.hackerrank.com/challenges/two-arrays/problem>
- [13] <https://www.hackerrank.com/challenges/candies/problem>
- [14] <https://www.hackerrank.com/challenges/greedy-florist/problem>
- [15] <https://www.hackerrank.com/challenges/angry-children/problem>
- [16] <https://www.hackerrank.com/challenges/pylons/problem>

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- [17] <https://www.hackerrank.com/challenges/cloudy-day/problem>
- [18] <https://www.hackerrank.com/challenges/board-cutting/problem>
- [19] <https://www.hackerrank.com/challenges/chief-hopper/problem>
- [20] <https://www.hackerrank.com/challenges/sherlock-and-minimax/problem>
- [21] <https://www.hackerrank.com/challenges/accessory-collection/problem>
- [22] <https://www.hackerrank.com/challenges/fighting-pits/problem>
- [23] <https://www.hackerrank.com/challenges/reverse-shuffle-merge/problem>
- [24] <https://www.hackerrank.com/challenges/team-formation/problem>





Lecture Agenda

✓ Section 1: Graph Theory

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Section 3: Strings



HackerRank - Strings



- [01] <https://www.hackerrank.com/challenges/reduced-string>
- [02] <https://www.hackerrank.com/challenges/camelcase/problem>
- [03] <https://www.hackerrank.com/challenges/strong-password>
- [04] <https://www.hackerrank.com/challenges/two-characters>
- [05] <https://www.hackerrank.com/challenges/caesar-cipher-1>
- [06] <https://www.hackerrank.com/challenges/mars-exploration>
- [07] <https://www.hackerrank.com/challenges/hackerrank-in-a-string>
- [08] <https://www.hackerrank.com/challenges/pangrams>
- [09] <https://www.hackerrank.com/challenges/weighted-uniform-string>
- [10] <https://www.hackerrank.com/challenges/separate-the-numbers>
- [11] <https://www.hackerrank.com/challenges/funny-string>
- [12] <https://www.hackerrank.com/challenges/gem-stones>
- [13] <https://www.hackerrank.com/challenges/alternating-characters/problem>
- [14] <https://www.hackerrank.com/challenges/beautiful-binary-string/problem>
- [15] <https://www.hackerrank.com/challenges/the-love-letter-mystery/problem>
- [16] <https://www.hackerrank.com/challenges/palindrome-index/problem>

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- [17] <https://www.hackerrank.com/challenges/anagram/problem>
- [18] <https://www.hackerrank.com/challenges/making-anagrams/problem>
- [19] <https://www.hackerrank.com/challenges/game-of-thrones/problem>
- [20] <https://www.hackerrank.com/challenges/two-strings/problem>
- [21] <https://www.hackerrank.com/challenges/string-construction/problem>
- [22] <https://www.hackerrank.com/challenges/sherlock-and-valid-string>
- [23] <https://www.hackerrank.com/challenges/richie-rich>
- [24] <https://www.hackerrank.com/challenges/maximum-palindromes>
- [25] <https://www.hackerrank.com/challenges/sherlock-and-anagrams>
- [26] <https://www.hackerrank.com/challenges/common-child>
- [27] <https://www.hackerrank.com/challenges/bear-and-steady-gene/problem>
- [28] <https://www.hackerrank.com/challenges/determining-dna-health/problem>
- [29] <https://www.hackerrank.com/challenges/count-strings/problem>
- [30] <https://www.hackerrank.com/challenges/build-a-string/problem>
- [31] <https://www.hackerrank.com/challenges/gridland-provinces/problem>
- [32] <https://www.hackerrank.com/challenges/string-function-calculation/problem>

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- [33] <https://www.hackerrank.com/challenges/challenging-palindromes/problem>
- [34] <https://www.hackerrank.com/challenges/ashton-and-string/problem>
- [35] <https://www.hackerrank.com/challenges/super-functional-strings/problem>
- [36] <https://www.hackerrank.com/challenges/circular-palindromes/problem>
- [37] <https://www.hackerrank.com/challenges/similar-strings/problem>
- [38] <https://www.hackerrank.com/challenges/two-two/problem>
- [39] <https://www.hackerrank.com/challenges/morgan-and-a-string/problem>
- [40] <https://www.hackerrank.com/challenges/cards-permutation/problem>
- [41] <https://www.hackerrank.com/challenges/string-similarity/problem>
- [42] <https://www.hackerrank.com/challenges/save-humanity/problem>
- [43] <https://www.hackerrank.com/challenges/find-strings/problem>
- [44] <https://www.hackerrank.com/challenges/palindromic-border/problem>
- [45] <https://www.hackerrank.com/challenges/two-strings-game/problem>
- [46] <https://www.hackerrank.com/challenges/letter-islands/problem>
- [47] <https://www.hackerrank.com/challenges/pseudo-isomorphic-substrings/problem>
- [48] <https://www.hackerrank.com/challenges/how-many-substrings/problem>



Lecture Agenda

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- ✓ Section 2: Greedy
- ✓ Section 3: Strings





DO
MORE.