

# Python Programming Language

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# Python Basics and Functions Practice



# Lecture Agenda

We will discuss in this lecture  
the following topics

- |                   |               |
|-------------------|---------------|
| 1- Input/Output   | [75 problems] |
| 2- Basic Operator | [90 problems] |
| 3- Condition      | [35 problems] |
| 4- Loop           | [60 problems] |
| 5- Function       | [60 problems] |
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Let's  
**STARTUP**



# Lecture Agenda

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**Section 1: Input/Output**

Section 2: Basic Operator

Section 3: Condition

Section 4: Loop

Section 5: Function



# HackerRank - Introduction



- [01] <https://www.hackerrank.com/challenges/fp-solve-me-first/problem>
- [02] <https://www.hackerrank.com/challenges/fp-hello-world/problem>
- [03] <https://www.hackerrank.com/challenges/fp-hello-world-n-times/problem>
- [04] <https://www.hackerrank.com/challenges/fp-list-replication/problem>
- [05] <https://www.hackerrank.com/challenges/fp-filter-array/problem>
- [06] <https://www.hackerrank.com/challenges/fp-filter-positions-in-a-list/problem>
- [07] <https://www.hackerrank.com/challenges/fp-array-of-n-elements/problem>
- [08] <https://www.hackerrank.com/challenges/fp-reverse-a-list/problem>
- [09] <https://www.hackerrank.com/challenges/fp-sum-of-odd-elements/problem>
- [10] <https://www.hackerrank.com/challenges/fp-list-length/problem>
- [11] <https://www.hackerrank.com/challenges/fp-update-list/problem>
- [12] <https://www.hackerrank.com/challenges/eval-ex/problem>
- [13] <https://www.hackerrank.com/challenges/area-under-curves-and-volume-of-revolving-a-curve/problem>
- [14] <https://www.hackerrank.com/challenges/lambda-calculus-reductions-1/problem>
- [15] <https://www.hackerrank.com/challenges/lambda-calculus-reductions-2/problem>
- [16] <https://www.hackerrank.com/challenges/lambda-calculus-getting-started/problem>

# HackerRank - Introduction



- [17] <https://www.hackerrank.com/challenges/lambda-calculus-understanding-the-syntax/problem>
- [18] <https://www.hackerrank.com/challenges/lambda-calculus-evaluate-the-expression/problem>
- [19] <https://www.hackerrank.com/challenges/functions-or-not/problem>
- [20] <https://www.hackerrank.com/challenges/lambda-march-compute-the-perimeter-of-a-polygon/problem>
- [21] <https://www.hackerrank.com/challenges/lambda-march-compute-the-area-of-a-polygon/problem>
- [22] <https://www.hackerrank.com/challenges/lambda-calculus-reductions-3/problem>
- [23] <https://www.hackerrank.com/challenges/lambda-calculus-reductions-4/problem>
- [24] <https://www.hackerrank.com/challenges/lambda-calculus-evaluate-the-expression-1/problem>
- [25] <https://www.hackerrank.com/challenges/lambda-calculus-evaluate-the-expression-2/problem>

# HackerEarth - Input/Output



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- [04] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/is-zoo-f6f309e7/>
- [05] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/anagrams-651/>
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- [07] <https://www.hackerearth.com/practice/basic-programming/complexity-analysis/time-and-space-complexity/practice-problems/algorithm/vowel-game-f1a1047c/>
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- [10] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/find-factorial/>
- [11] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/modify-the-string/>
- [12] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/roy-and-profile-picture/>
- [13] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/split-house-547be0e9/>
- [14] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/e-maze-in-1aa4e2ac/>
- [15] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/bricks-game-5140869d/>
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- [18] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/two-strings-4/>



# HackerEarth - Input/Output



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- [20] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/vc-pairs/>
- [21] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/friends-relationship-1/>
- [22] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/duration/>
- [23] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/database-0c7cce47/>
- [24] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/cartag-948c2b02/>
- [25] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/arithmetic-progression-1-81131fa7/>
- [26] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/sum-it-if-you-can-4867f851/>
- [27] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/teddy-and-tweety/>
- [28] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/hello-32/>
- [29] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/aman-mrsharma/>
- [30] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/doctors-secret/>
- [31] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/tds-and-his-breakup/>
- [32] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/i-am-easy/>
- [33] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/life-the-universe-and-everything/>
- [34] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/ladderophilia/>
- [35] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/char-sum-2d3a6ab5/>
- [36] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/conject-it/>

# HackerEarth - Input/Output



- [37] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/play-with-numbers-2/>
- [38] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/step-conversion/>
- [39] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/divisibe-or-2d8e196a/>
- [40] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/a-movement-1/>
- [41] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/back-to-school-1/>
- [42] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/divisible-or-not-81b86ad7/>
- [43] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/seven-segment-display-nov-easy-e7f87ce0/>
- [44] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/best-index-1-45a2f8ff/>
- [45] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/cipher-1/>
- [46] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/minimise-cost-89b54cb9/>
- [47] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/magical-word/>
- [48] <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/make-all-equal-90a21ab2/>

# Lecture Agenda

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✓ Section 1: Input/Output

**Section 2: Basic Operator**

Section 3: Condition

Section 4: Loop

Section 5: Function



# Codeforces - Basic Operator



- [01] CF-Round 340: <http://codeforces.com/problemset/problem/617/A>
- [02] CF-Round 304: <http://codeforces.com/problemset/problem/546/A>
- [03] CF-Round 395: <http://codeforces.com/problemset/problem/764/A>
- [04] CF-Round 107: <http://codeforces.com/problemset/problem/151/A>
- [05] CF-Round 256: <http://codeforces.com/problemset/problem/448/A>
- [06] CF-Round 327: <http://codeforces.com/problemset/problem/591/A>
- [07] CF-Round 332: <http://codeforces.com/problemset/problem/599/A>
- [08] CF-Round 125: <http://codeforces.com/problemset/problem/199/A>
- [09] CF-Round 350: <http://codeforces.com/problemset/problem/670/A>
- [10] CF-Round 123: <http://codeforces.com/problemset/problem/195/A>
- [11] CF-Round 138: <http://codeforces.com/problemset/problem/224/A>
- [12] CF-Round 277: <http://codeforces.com/problemset/problem/486/A>
- [13] CF-Round 266: <http://codeforces.com/problemset/problem/466/A>
- [14] CF-Round 133: <http://codeforces.com/problemset/problem/216/A>
- [15] CF-Round 198: <http://codeforces.com/problemset/problem/340/A>

# HackerEarth - Operators



- [01] <https://www.hackerearth.com/practice/basic-programming/complexity-analysis/time-and-space-complexity/practice-problems/algorithm/a-b-4/>
- [02] <https://www.hackerearth.com/practice/basic-programming/operators/basics-of-operators/practice-problems/algorithm/going-to-office-e2ef3feb/>
- [03] <https://www.hackerearth.com/practice/basic-programming/operators/basics-of-operators/practice-problems/algorithm/yet-another-partition-problem/>
- [04] <https://www.hackerearth.com/practice/basic-programming/operators/basics-of-operators/practice-problems/algorithm/birthday-party-12/>
- [05] <https://www.hackerearth.com/practice/basic-programming/complexity-analysis/time-and-space-complexity/practice-problems/algorithm/vowel-game-f1a1047c/>
- [06] <https://www.hackerearth.com/practice/basic-programming/operators/basics-of-operators/practice-problems/algorithm/let-us-understand-computer-78476e7a/>

# HackerEarth - Bit Manipulation



- [01] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/mystery-30/>
- [02] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/a-95/>
- [03] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/mystery-31/>
- [04] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/bitmasking/>
- [05] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/monk-and-tasks/>
- [06] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/sherlock-and-xor/>
- [07] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/hihi-and-crazy-bits/>
- [08] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/subham-and-binary-strings/>
- [09] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/monk-and-the-box-of-cookies/>
- [10] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/find-the-numbers-75f24949/>
- [11] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/lets-shift-2-36d90caa/>
- [12] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/the-castle-gate-july-easy/>
- [13] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/a-new-experiment/>
- [14] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/danny-and-his-loneliness/>
- [15] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/aaryan-subsequences-and-great-xor/>
- [16] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/power-of-2-6/>
- [17] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/hunny-bunny-eebee22a/>
- [18] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/monk-and-his-father/>

# HackerEarth - Bit Manipulation



- [19] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/subset-and-4/>
- [20] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/the-corona-world/>
- [21] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/lazy-panda-1/>
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- [23] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/sorting-1-581e9aa0/>
- [24] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/ankits-no-ed95054d/>
- [25] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/monk-and-his-friend/>
- [26] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/sum-of-numbers-9/>
- [27] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/and-sum-54d31846/>
- [28] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/pikachu-loves-or-0c02a270/>
- [29] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/chinu-and-his-project/>
- [30] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/micro-and-binary-strings/>
- [31] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/bit-flippings-dd1f7ef1/>
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- [33] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/xsquare-and-two-strings-1/>
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- [35] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/monks-choice-of-numbers-1/>
- [36] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/lexicographic-maximum-bit-shift-bbb95118/>

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- [37] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/finding-groups/>
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- [40] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/maximum-and/>
- [41] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/lucky-numbers-20/>
- [42] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/ram-and-shyam-buy-crackers-de722684/>
- [43] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/contest-bw-sonika-and-rishika-216a7b6d/>
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- [45] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/set-and-unset-bits/>
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- [47] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/and-this-one-784d9012/>
- [48] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/maximizing-xor-value-70f649e0/>
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- [51] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/aish-and-xor-2/>
- [52] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/navi-and-maths/>
- [53] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/mystery-number/>
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# HackerEarth - Bit Manipulation



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- [56] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/xor-queries-3/>
- [57] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/xor-rectangle/>
- [58] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/a-98/>
- [59] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/monsters-in-grid-1/>
- [60] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/game-of-destruction-f96cd509/>
- [61] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/special-numbers-4-dffaa6e8/>
- [62] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/and-operation-3-0b1a025c/>
- [63] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/mattey-multiplication-6/>
- [64] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/haaaave-you-met-ted/>
- [65] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/the-game-dd8618f3/>
- [66] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/samu-and-her-birthday-party-1/>
- [67] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/monk-and-binary-array-1/>
- [68] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/substring-queries/>
- [69] <https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/practice-problems/algorithm/chandan-and-balanced-strings/>

# Lecture Agenda

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✓ Section 1: Input/Output

✓ Section 2: Basic Operator

**Section 3: Condition**

Section 4: Loop

Section 5: Function



# Codeforces - Condition



- [01] CF-Round 322: <http://codeforces.com/problemset/problem/581/A>
- [02] CF-Round 388: <http://codeforces.com/problemset/problem/749/A>
- [03] CF-Round 172: <http://codeforces.com/problemset/problem/281/A>
- [04] CF-Round 348: <http://codeforces.com/problemset/problem/669/A>
- [05] CF-Round 101: <http://codeforces.com/problemset/problem/141/A>
- [06] CF-Round 186: <http://codeforces.com/problemset/problem/313/A>
- [07] CF-Round 389: <http://codeforces.com/problemset/problem/752/A>
- [08] CF-Round 393: <http://codeforces.com/problemset/problem/760/A>
- [09] CF-Round 114: <http://codeforces.com/problemset/problem/168/A>
- [10] CF-Round 188: <http://codeforces.com/problemset/problem/318/A>
- [11] CF-Round 258: <http://codeforces.com/problemset/problem/451/A>
- [12] CF-Round 285: <http://codeforces.com/problemset/problem/501/A>
- [13] CF-Round 337: <http://codeforces.com/problemset/problem/610/A>
- [14] CF-Round 362: <http://codeforces.com/problemset/problem/697/A>
- [15] CF-Round 396: <http://codeforces.com/problemset/problem/766/A>
- [16] CF-Round 195: <http://codeforces.com/problemset/problem/336/A>
- [17] CF-Round 206: <http://codeforces.com/problemset/problem/355/A>

# Codeforces - Condition



- [18] CF-Round 274: <http://codeforces.com/problemset/problem/479/A>
- [19] CF-Round 292: <http://codeforces.com/problemset/problem/515/A>
- [20] CF-Round 324: <http://codeforces.com/problemset/problem/584/A>
- [21] CF-Round 346: <http://codeforces.com/problemset/problem/659/A>
- [22] CF-Round 349: <http://codeforces.com/problemset/problem/667/A>
- [23] CF-Round 353: <http://codeforces.com/problemset/problem/675/A>
- [24] CF-Round 371: <http://codeforces.com/problemset/problem/714/A>
- [25] CF-Round 394: <http://codeforces.com/problemset/problem/761/A>
- [26] CF-Round 217: <http://codeforces.com/problemset/problem/370/A>
- [27] CF-Round 273: <http://codeforces.com/problemset/problem/478/A>
- [28] CF-Round 120: <http://codeforces.com/problemset/problem/190/A>
- [29] CF-Round 261: <http://codeforces.com/problemset/problem/459/A>
- [30] CF-Round 140: <http://codeforces.com/problemset/problem/227/A>
- [31] CF-Round 171: <http://codeforces.com/problemset/problem/279/A>
- [32] CF-Round 124: <http://codeforces.com/problemset/problem/197/A>
- [33] CF-Round 100: <http://codeforces.com/problemset/problem/140/A>
- [34] CF-Round 342: <http://codeforces.com/problemset/problem/625/A>

# Lecture Agenda

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✓ Section 1: Input/Output

✓ Section 2: Basic Operator

✓ Section 3: Condition

**Section 4: Loop**

Section 5: Function



# Codeforces - Loop



- [01] CF-Round 366: <http://codeforces.com/problemset/problem/705/A>
- [02] CF-Round 200: <http://codeforces.com/problemset/problem/344/A>
- [03] CF-Round 365: <http://codeforces.com/problemset/problem/703/A>
- [04] CF-Round 143: <http://codeforces.com/problemset/problem/231/A>
- [05] CF-Round 144: <http://codeforces.com/problemset/problem/233/A>
- [06] CF-Round 210: <http://codeforces.com/problemset/problem/361/A>
- [07] CF-Round 222: <http://codeforces.com/problemset/problem/378/A>
- [08] CF-Round 259: <http://codeforces.com/problemset/problem/454/A>
- [09] CF-Round 267: <http://codeforces.com/problemset/problem/467/A>
- [10] CF-Round 352: <http://codeforces.com/problemset/problem/672/A>
- [11] CF-Round 357: <http://codeforces.com/problemset/problem/681/A>
- [12] CF-Round 359: <http://codeforces.com/problemset/problem/686/A>
- [13] CF-Round 377: <http://codeforces.com/problemset/problem/732/A>
- [14] CF-Round 386: <http://codeforces.com/problemset/problem/746/A>
- [15] CF-Round 105: <http://codeforces.com/problemset/problem/148/A>
- [16] CF-Round 152: <http://codeforces.com/problemset/problem/248/A>
- [17] CF-Round 166: <http://codeforces.com/problemset/problem/271/A>

# Codeforces - Loop



- [18] CF-Round 247: <http://codeforces.com/problemset/problem/431/A>
- [19] CF-Round 270: <http://codeforces.com/problemset/problem/472/A>
- [20] CF-Round 280: <http://codeforces.com/problemset/problem/492/A>
- [21] CF-Round 400: <http://codeforces.com/problemset/problem/776/A>
- [22] CF-Round 122: <http://codeforces.com/problemset/problem/194/A>
- [23] CF-Round 131: <http://codeforces.com/problemset/problem/214/A>
- [24] CF-Round 136: <http://codeforces.com/problemset/problem/221/A>
- [25] CF-Round 151: <http://codeforces.com/problemset/problem/246/A>
- [26] CF-Round 169: <http://codeforces.com/problemset/problem/276/A>
- [27] CF-Round 194: <http://codeforces.com/problemset/problem/334/A>
- [28] CF-Round 262: <http://codeforces.com/problemset/problem/460/A>
- [29] CF-Round 320: <http://codeforces.com/problemset/problem/579/A>
- [30] CF-Round 326: <http://codeforces.com/problemset/problem/588/A>
- [31] CF-Round 383: <http://codeforces.com/problemset/problem/742/A>
- [32] CF-Round 387: <http://codeforces.com/problemset/problem/747/A>
- [33] CF-Round 175: <http://codeforces.com/problemset/problem/285/A>
- [34] CF-Round 177: <http://codeforces.com/problemset/problem/289/A>

# Codeforces - Loop



- [35] CF-Round 190: <http://codeforces.com/problemset/problem/322/A>
- [36] CF-Round 214: <http://codeforces.com/problemset/problem/366/A>
- [37] CF-Round 272: <http://codeforces.com/problemset/problem/476/A>
- [38] CF-Round 275: <http://codeforces.com/problemset/problem/483/A>
- [39] CF-Round 296: <http://codeforces.com/problemset/problem/527/A>
- [40] CF-Round 298: <http://codeforces.com/problemset/problem/534/A>
- [41] CF-Round 308: <http://codeforces.com/problemset/problem/552/A>
- [42] CF-Round 319: <http://codeforces.com/problemset/problem/577/A>
- [43] CF-Round 345: <http://codeforces.com/problemset/problem/651/A>
- [44] CF-Round 367: <http://codeforces.com/problemset/problem/706/A>
- [45] CF-Round 102: <http://codeforces.com/problemset/problem/143/A>
- [46] CF-Round 128: <http://codeforces.com/problemset/problem/203/A>
- [47] CF-Round 139: <http://codeforces.com/problemset/problem/225/A>
- [48] CF-Round 148: <http://codeforces.com/problemset/problem/239/A>
- [49] CF-Round 165: <http://codeforces.com/problemset/problem/270/A>
- [50] CF-Round 236: <http://codeforces.com/problemset/problem/402/A>
- [51] CF-Round 358: <http://codeforces.com/problemset/problem/682/A>



# Codeforces - Loop



- [52] CF-Round 119: <http://codeforces.com/problemset/problem/189/A>
- [53] CF-Round 121: <http://codeforces.com/problemset/problem/192/A>
- [54] CF-Round 183: <http://codeforces.com/problemset/problem/304/A>
- [55] CF-Round 381: <http://codeforces.com/problemset/problem/740/A>
- [56] CF-Round 115: <http://codeforces.com/problemset/problem/175/A>
- [57] CF-Round 158: <http://codeforces.com/problemset/problem/260/A>
- [58] CF-Round 174: <http://codeforces.com/problemset/problem/284/A>
- [59] CF-Round 276: <http://codeforces.com/problemset/problem/485/A>
- [60] CF-Round 281: <http://codeforces.com/problemset/problem/493/A>
- [61] CF-Round 315: <http://codeforces.com/problemset/problem/569/A>
- [62] CF-Round 339: <http://codeforces.com/problemset/problem/614/A>
- [63] CF-Round 220: <http://codeforces.com/problemset/problem/374/A>

# Lecture Agenda

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✓ Section 1: Input/Output

✓ Section 2: Basic Operator

✓ Section 3: Condition

✓ Section 4: Loop

**Section 5: Function**



# HackerRank - Functional Structures



- [01] <https://www.hackerrank.com/challenges/lists-and-gcd/problem>
- [02] <https://www.hackerrank.com/challenges/swap-nodes/problem>
- [03] <https://www.hackerrank.com/challenges/valid-bst/problem>
- [04] <https://www.hackerrank.com/challenges/prison-transport/problem>
- [05] <https://www.hackerrank.com/challenges/kmp-fp/problem>
- [06] <https://www.hackerrank.com/challenges/john-and-fences/problem>
- [07] <https://www.hackerrank.com/challenges/range-minimum-query/problem>
- [08] <https://www.hackerrank.com/challenges/tree-manager/problem>
- [09] <https://www.hackerrank.com/challenges/matrix-rotation/problem>
- [10] <https://www.hackerrank.com/challenges/stocks-prediction/problem>
- [11] <https://www.hackerrank.com/challenges/fighting-armies/problem>
- [12] <https://www.hackerrank.com/challenges/order-exercises/problem>
- [13] <https://www.hackerrank.com/challenges/mirko-at-construction-site/problem>

# HackerRank - Memoization



- [01] <https://www.hackerrank.com/challenges/pentagonal-numbers/problem>
- [02] <https://www.hackerrank.com/challenges/fibonacci-fp/problem>
- [03] <https://www.hackerrank.com/challenges/different-ways-fp/problem>
- [04] <https://www.hackerrank.com/challenges/number-of-binary-search-tree/problem>
- [05] <https://www.hackerrank.com/challenges/dice-path/problem>
- [06] <https://www.hackerrank.com/challenges/sherlock-and-the-maze/problem>
- [07] <https://www.hackerrank.com/challenges/password-cracker-fp/problem>
- [08] <https://www.hackerrank.com/challenges/reverse-factorization/problem>
- [09] <https://www.hackerrank.com/challenges/bangalore-bank/problem>
- [10] <https://www.hackerrank.com/challenges/expressions/problem>

# HackerRank - Ad-Hoc



- [01] <https://www.hackerrank.com/challenges/rotate-string/problem>
- [02] <https://www.hackerrank.com/challenges/remove-duplicates/problem>
- [03] <https://www.hackerrank.com/challenges/huge-gcd-fp/problem>
- [04] <https://www.hackerrank.com/challenges/missing-numbers-fp/problem>
- [05] <https://www.hackerrank.com/challenges/common-divisors/problem>
- [06] <https://www.hackerrank.com/challenges/subset-sum/problem>
- [07] <https://www.hackerrank.com/challenges/jumping-bunnies/problem>
- [08] <https://www.hackerrank.com/challenges/mango/problem>
- [09] <https://www.hackerrank.com/challenges/captain-prime/problem>
- [10] <https://www.hackerrank.com/challenges/minimum-multiple/problem>
- [11] <https://www.hackerrank.com/challenges/messy-medians/problem>
- [12] <https://www.hackerrank.com/challenges/boleyn-salary/problem>
- [13] <https://www.hackerrank.com/challenges/kundu-and-bubble-wrap/problem>
- [14] <https://www.hackerrank.com/challenges/puzzle-and-pc/problem>
- [15] <https://www.hackerrank.com/challenges/game-of-kyles/problem>
- [16] <https://www.hackerrank.com/challenges/elementary-watson>
- [17] <https://www.hackerrank.com/challenges/convolutional-coding/problem>

# HackerRank - Misc

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- [01] <https://www.hackerrank.com/challenges/simplify-the-algebraic-expressions/problem>
- [02] <https://www.hackerrank.com/challenges/brainf-k-interpretter-fp/problem>
- [03] <https://www.hackerrank.com/challenges/expressions-v2/problem>
- [04] <https://www.hackerrank.com/challenges/while-language-fp/problem>
- [05] <https://www.hackerrank.com/challenges/intuitive-language/problem>
- [06] <https://www.hackerrank.com/challenges/down-with-abstractions/problem>
- [07] <https://www.hackerrank.com/challenges/infer/problem>

# Lecture Agenda

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- ✓ Section 1: Input/Output
- ✓ Section 2: Basic Operator
- ✓ Section 3: Condition
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DO  
MORE.