

# Codeforces Online Judge

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# Codeforces Online Judge - Phase 2.2

# Lecture Agenda

We will discuss in this lecture  
the following topics

- |                            |               |
|----------------------------|---------------|
| 1- Data Structure Problems | [16 problems] |
| 2- Mathematical Problems   | [27 problems] |
| 3- String Problems         | [16 problems] |
| 4- Greedy Problems         | [27 problems] |
| 5- Brute Force Problems    | [8 problems]  |

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Let's  
**STARTUP**

# Lecture Agenda

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Section 1: Data Structure Problems

Section 2: Mathematical Problems

Section 3: String Problems

Section 4: Greedy Problems

Section 5: Brute Force Problems



# Data Structure Problems

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- [01] CF-Round 136: <http://codeforces.com/problemset/problem/221/B>
- [02] CF-Round 137: <http://codeforces.com/problemset/problem/222/B>
- [03] CF-Round 146: <http://codeforces.com/problemset/problem/236/B>
- [04] CF-Round 192: <http://codeforces.com/problemset/problem/330/B>
- [05] CF-Round 204: <http://codeforces.com/problemset/problem/352/B>
- [06] CF-Round 263: <http://codeforces.com/problemset/problem/462/B>
- [07] CF-Round 314: <http://codeforces.com/problemset/problem/567/B>
- [08] CF-Round 341: <http://codeforces.com/problemset/problem/621/B>
- [09] CF-Round 368: <http://codeforces.com/problemset/problem/707/B>
- [10] CF-Round 177: <http://codeforces.com/problemset/problem/289/B>
- [11] CF-Round 269: <http://codeforces.com/problemset/problem/471/B>
- [12] CF-Round 274: <http://codeforces.com/problemset/problem/479/B>
- [13] CF-Round 277: <http://codeforces.com/problemset/problem/486/B>
- [14] CF-Round 292: <http://codeforces.com/problemset/problem/515/B>
- [15] CF-Round 317: <http://codeforces.com/problemset/problem/572/B>
- [16] CF-Round 320: <http://codeforces.com/problemset/problem/579/B>



# Data Structure Problems Solution

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- [01] CF-Round 136: <http://codeforces.com/contest/221/submission/54019734>
- [02] CF-Round 137: <http://codeforces.com/contest/222/submission/54020085>
- [03] CF-Round 146: <http://codeforces.com/contest/236/submission/54024250>
- [04] CF-Round 192: <http://codeforces.com/contest/330/submission/54054123>
- [05] CF-Round 204: <http://codeforces.com/contest/352/submission/54055195>
- [06] CF-Round 263: <http://codeforces.com/contest/462/submission/53194329>
- [07] CF-Round 314: <http://codeforces.com/contest/567/submission/53563322>
- [08] CF-Round 341: <http://codeforces.com/contest/621/submission/53564413>
- [09] CF-Round 368: <http://codeforces.com/contest/707/submission/53565334>
- [10] CF-Round 177: <http://codeforces.com/contest/289/submission/53664920>
- [11] CF-Round 269: <http://codeforces.com/contest/471/submission/53673683>
- [12] CF-Round 274: <http://codeforces.com/contest/479/submission/53673767>
- [13] CF-Round 277: <http://codeforces.com/contest/486/submission/53790256>
- [14] CF-Round 292: <http://codeforces.com/contest/515/submission/53811230>
- [15] CF-Round 317: <http://codeforces.com/contest/572/submission/53812503>
- [16] CF-Round 320: <http://codeforces.com/contest/579/submission/53812678>







# Lecture Agenda

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✓ Section 1: Data Structure Problems

**Section 2: Mathematical Problems**

Section 3: String Problems

Section 4: Greedy Problems

Section 5: Brute Force Problems



# Mathematical Problems

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- [01] CF-Round 396: <http://codeforces.com/problemset/problem/766/B>
- [02] CF-Round 104: <http://codeforces.com/problemset/problem/146/B>
- [03] CF-Round 122: <http://codeforces.com/problemset/problem/194/B>
- [04] CF-Round 123: <http://codeforces.com/problemset/problem/195/B>
- [05] CF-Round 132: <http://codeforces.com/problemset/problem/215/B>
- [06] CF-Round 142: <http://codeforces.com/problemset/problem/230/B>
- [07] CF-Round 185: <http://codeforces.com/problemset/problem/312/B>
- [08] CF-Round 200: <http://codeforces.com/problemset/problem/344/B>
- [09] CF-Round 273: <http://codeforces.com/problemset/problem/478/B>
- [10] CF-Round 308: <http://codeforces.com/problemset/problem/552/B>
- [11] CF-Round 313: <http://codeforces.com/problemset/problem/560/B>
- [12] CF-Round 357: <http://codeforces.com/problemset/problem/681/B>
- [13] CF-Round 388: <http://codeforces.com/problemset/problem/749/B>
- [14] CF-Round 394: <http://codeforces.com/problemset/problem/761/B>
- [15] CF-Round 101: <http://codeforces.com/problemset/problem/141/B>
- [16] CF-Round 119: <http://codeforces.com/problemset/problem/189/B>



# Mathematical Problems Solution

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- [01] CF-Round 396: <http://codeforces.com/contest/766/submission/50280922>
- [02] CF-Round 104: <http://codeforces.com/contest/146/submission/54016532>
- [03] CF-Round 122: <http://codeforces.com/contest/194/submission/54018844>
- [04] CF-Round 123: <http://codeforces.com/contest/195/submission/54019391>
- [05] CF-Round 132: <http://codeforces.com/contest/215/submission/54019557>
- [06] CF-Round 142: <http://codeforces.com/contest/230/submission/54023821>
- [07] CF-Round 185: <http://codeforces.com/contest/312/submission/54053859>
- [08] CF-Round 200: <http://codeforces.com/contest/344/submission/54054170>
- [09] CF-Round 273: <http://codeforces.com/contest/478/submission/53560543>
- [10] CF-Round 308: <http://codeforces.com/contest/552/submission/53563076>
- [11] CF-Round 313: <http://codeforces.com/contest/560/submission/53563210>
- [12] CF-Round 357: <http://codeforces.com/contest/681/submission/53565086>
- [13] CF-Round 388: <http://codeforces.com/contest/749/submission/53568231>
- [14] CF-Round 394: <http://codeforces.com/contest/761/submission/53568416>
- [15] CF-Round 101: <http://codeforces.com/contest/141/submission/53568713>
- [16] CF-Round 119: <http://codeforces.com/contest/189/submission/53661329>



# Mathematical Problems

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- [17] CF-Round 124: <http://codeforces.com/problemset/problem/197/B>
- [18] CF-Round 152: <http://codeforces.com/problemset/problem/248/B>
- [19] CF-Round 159: <http://codeforces.com/problemset/problem/257/B>
- [20] CF-Round 166: <http://codeforces.com/problemset/problem/271/B>
- [21] CF-Round 167: <http://codeforces.com/problemset/problem/272/B>
- [22] CF-Round 196: <http://codeforces.com/problemset/problem/337/B>
- [23] CF-Round 209: <http://codeforces.com/problemset/problem/359/B>
- [24] CF-Round 218: <http://codeforces.com/problemset/problem/371/B>
- [25] CF-Round 257: <http://codeforces.com/problemset/problem/450/B>
- [26] CF-Round 287: <http://codeforces.com/problemset/problem/507/B>
- [27] CF-Round 291: <http://codeforces.com/problemset/problem/514/B>



# Mathematical Problems Solution

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- [17] CF-Round 124: <http://codeforces.com/contest/197/submission/53661470>
- [18] CF-Round 152: <http://codeforces.com/contest/248/submission/53662763>
- [19] CF-Round 159: <http://codeforces.com/contest/257/submission/53663039>
- [20] CF-Round 166: <http://codeforces.com/contest/271/submission/53664011>
- [21] CF-Round 167: <http://codeforces.com/contest/272/submission/53664114>
- [22] CF-Round 196: <http://codeforces.com/contest/337/submission/53665478>
- [23] CF-Round 209: <http://codeforces.com/contest/359/submission/53666193>
- [24] CF-Round 218: <http://codeforces.com/contest/371/submission/53666986>
- [25] CF-Round 257: <http://codeforces.com/contest/450/submission/53673342>
- [26] CF-Round 287: <http://codeforces.com/contest/507/submission/53792293>
- [27] CF-Round 291: <http://codeforces.com/contest/514/submission/53811052>





# Lecture Agenda

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✓ Section 1: Data Structure Problems

✓ Section 2: Mathematical Problems

**Section 3: String Problems**

Section 4: Greedy Problems

Section 5: Brute Force Problems



# String Problems

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- [01] CF-Round 239: <http://codeforces.com/problemset/problem/408/B>
- [02] CF-Round 303: <http://codeforces.com/problemset/problem/545/B>
- [03] CF-Round 309: <http://codeforces.com/problemset/problem/554/B>
- [04] CF-Round 327: <http://codeforces.com/problemset/problem/591/B>
- [05] CF-Round 370: <http://codeforces.com/problemset/problem/712/B>
- [06] CF-Round 390: <http://codeforces.com/problemset/problem/754/B>
- [07] CF-Round 392: <http://codeforces.com/problemset/problem/758/B>
- [08] CF-Round 107: <http://codeforces.com/problemset/problem/151/B>
- [09] CF-Round 180: <http://codeforces.com/problemset/problem/298/B>
- [10] CF-Round 188: <http://codeforces.com/problemset/problem/318/B>
- [11] CF-Round 226: <http://codeforces.com/problemset/problem/385/B>
- [12] CF-Round 234: <http://codeforces.com/problemset/problem/400/B>
- [13] CF-Round 272: <http://codeforces.com/problemset/problem/476/B>
- [14] CF-Round 342: <http://codeforces.com/problemset/problem/625/B>
- [15] CF-Round 141: <http://codeforces.com/problemset/problem/228/B>
- [16] CF-Round 169: <http://codeforces.com/problemset/problem/276/B>





# String Problems Solution

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- [01] CF-Round 239: <http://codeforces.com/contest/408/submission/50429389>
- [02] CF-Round 303: <http://codeforces.com/contest/545/submission/50452037>
- [03] CF-Round 309: <http://codeforces.com/contest/554/submission/50453381>
- [04] CF-Round 327: <http://codeforces.com/contest/591/submission/50477539>
- [05] CF-Round 370: <http://codeforces.com/contest/712/submission/50479247>
- [06] CF-Round 390: <http://codeforces.com/contest/754/submission/50482089>
- [07] CF-Round 392: <http://codeforces.com/contest/758/submission/50482237>
- [08] CF-Round 107: <http://codeforces.com/contest/151/submission/54018720>
- [09] CF-Round 180: <http://codeforces.com/contest/298/submission/54053772>
- [10] CF-Round 188: <http://codeforces.com/contest/318/submission/54053893>
- [11] CF-Round 226: <http://codeforces.com/contest/385/submission/53181471>
- [12] CF-Round 234: <http://codeforces.com/contest/400/submission/53181590>
- [13] CF-Round 272: <http://codeforces.com/contest/476/submission/53560354>
- [14] CF-Round 342: <http://codeforces.com/contest/625/submission/53564456>
- [15] CF-Round 141: <http://codeforces.com/contest/228/submission/53662655>
- [16] CF-Round 169: <http://codeforces.com/contest/276/submission/53664285>





# Lecture Agenda

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✓ Section 1: Data Structure Problems

✓ Section 2: Mathematical Problems

✓ Section 3: String Problems

**Section 4: Greedy Problems**

Section 5: Brute Force Problems



# Greedy Problems

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- [01] CF-Round 217: <http://codeforces.com/problemset/problem/370/B>
- [02] CF-Round 221: <http://codeforces.com/problemset/problem/376/B>
- [03] CF-Round 222: <http://codeforces.com/problemset/problem/378/B>
- [04] CF-Round 243: <http://codeforces.com/problemset/problem/426/B>
- [05] CF-Round 258: <http://codeforces.com/problemset/problem/451/B>
- [06] CF-Round 259: <http://codeforces.com/problemset/problem/454/B>
- [07] CF-Round 261: <http://codeforces.com/problemset/problem/459/B>
- [08] CF-Round 268: <http://codeforces.com/problemset/problem/469/B>
- [09] CF-Round 270: <http://codeforces.com/problemset/problem/472/B>
- [10] CF-Round 271: <http://codeforces.com/problemset/problem/474/B>
- [11] CF-Round 278: <http://codeforces.com/problemset/problem/489/B>
- [12] CF-Round 288: <http://codeforces.com/problemset/problem/508/B>
- [13] CF-Round 289: <http://codeforces.com/problemset/problem/509/B>
- [14] CF-Round 316: <http://codeforces.com/problemset/problem/570/B>
- [15] CF-Round 325: <http://codeforces.com/problemset/problem/586/B>
- [16] CF-Round 337: <http://codeforces.com/problemset/problem/610/B>



# Greedy Problems Solution

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- [01] CF-Round 217: <http://codeforces.com/contest/370/submission/54054578>
- [02] CF-Round 221: <http://codeforces.com/contest/376/submission/54054773>
- [03] CF-Round 222: <http://codeforces.com/contest/378/submission/53181315>
- [04] CF-Round 243: <http://codeforces.com/contest/426/submission/53181828>
- [05] CF-Round 258: <http://codeforces.com/contest/451/submission/53182098>
- [06] CF-Round 259: <http://codeforces.com/contest/454/submission/53182277>
- [07] CF-Round 261: <http://codeforces.com/contest/459/submission/53194219>
- [08] CF-Round 268: <http://codeforces.com/contest/469/submission/53194781>
- [09] CF-Round 270: <http://codeforces.com/contest/472/submission/53559757>
- [10] CF-Round 271: <http://codeforces.com/contest/474/submission/53559927>
- [11] CF-Round 278: <http://codeforces.com/contest/489/submission/53561240>
- [12] CF-Round 288: <http://codeforces.com/contest/508/submission/53562825>
- [13] CF-Round 289: <http://codeforces.com/contest/509/submission/53562942>
- [14] CF-Round 316: <http://codeforces.com/contest/570/submission/53563696>
- [15] CF-Round 325: <http://codeforces.com/contest/586/submission/53563852>
- [16] CF-Round 337: <http://codeforces.com/contest/610/submission/53564074>



# Greedy Problems

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- [17] CF-Round 340: <http://codeforces.com/problemset/problem/617/B>
- [18] CF-Round 344: <http://codeforces.com/problemset/problem/631/B>
- [19] CF-Round 108: <http://codeforces.com/problemset/problem/152/B>
- [20] CF-Round 115: <http://codeforces.com/problemset/problem/175/B>
- [21] CF-Round 154: <http://codeforces.com/problemset/problem/253/B>
- [22] CF-Round 165: <http://codeforces.com/problemset/problem/270/B>
- [23] CF-Round 207: <http://codeforces.com/problemset/problem/357/B>
- [24] CF-Round 252: <http://codeforces.com/problemset/problem/441/B>
- [25] CF-Round 302: <http://codeforces.com/problemset/problem/544/B>
- [26] CF-Round 312: <http://codeforces.com/problemset/problem/558/B>
- [27] CF-Round 334: <http://codeforces.com/problemset/problem/604/B>



# Greedy Problems Solution

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- [17] CF-Round 340: <http://codeforces.com/contest/617/submission/53564286>
- [18] CF-Round 344: <http://codeforces.com/contest/631/submission/53564725>
- [19] CF-Round 108: <http://codeforces.com/contest/152/submission/53578923>
- [20] CF-Round 115: <http://codeforces.com/contest/175/submission/53661273>
- [21] CF-Round 154: <http://codeforces.com/contest/253/submission/53662859>
- [22] CF-Round 165: <http://codeforces.com/contest/270/submission/53663111>
- [23] CF-Round 207: <http://codeforces.com/contest/357/submission/53666127>
- [24] CF-Round 252: <http://codeforces.com/contest/441/submission/53673084>
- [25] CF-Round 302: <http://codeforces.com/contest/544/submission/53811507>
- [26] CF-Round 312: <http://codeforces.com/contest/558/submission/53812306>
- [27] CF-Round 334: <http://codeforces.com/contest/604/submission/53823101>









# Lecture Agenda

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- ✓ Section 1: Data Structure Problems
- ✓ Section 2: Mathematical Problems
- ✓ Section 3: String Problems
- ✓ Section 4: Greedy Problems
- Section 5: Brute Force Problems**



# Brute Force Problems

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- [01] CF-Round 380: <http://codeforces.com/problemset/problem/738/B>
- [02] CF-Round 128: <http://codeforces.com/problemset/problem/203/B>
- [03] CF-Round 129: <http://codeforces.com/problemset/problem/205/B>
- [04] CF-Round 171: <http://codeforces.com/problemset/problem/279/B>
- [05] CF-Round 183: <http://codeforces.com/problemset/problem/304/B>
- [06] CF-Round 236: <http://codeforces.com/problemset/problem/402/B>
- [07] CF-Round 245: <http://codeforces.com/problemset/problem/430/B>
- [08] CF-Round 305: <http://codeforces.com/problemset/problem/548/B>



# Brute Force Problems Solution

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- [01] CF-Round 380: <http://codeforces.com/contest/738/submission/53568136>
- [02] CF-Round 128: <http://codeforces.com/contest/203/submission/53896574>
- [03] CF-Round 129: <http://codeforces.com/contest/205/submission/53661550>
- [04] CF-Round 171: <http://codeforces.com/contest/279/submission/53664574>
- [05] CF-Round 183: <http://codeforces.com/contest/304/submission/53665397>
- [06] CF-Round 236: <http://codeforces.com/contest/402/submission/53668261>
- [07] CF-Round 245: <http://codeforces.com/contest/430/submission/53671108>
- [08] CF-Round 305: <http://codeforces.com/contest/548/submission/53812194>



# Lecture Agenda

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- ✓ Section 1: Data Structure Problems
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DO  
MORE.