Codeforces 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

facebook.com/cs.MohamedAyman

linkedin.com/in/cs-MohamedAyman

codeforces.com/profile/Mohamed_Ayman

Codeforces Online Judge – Phase 1.2

Lecture Agenda

We will discuss in this lecture the following topics

1-	Basic Operator Problems	[5 problems]
2-	Condition Problems	[11 problems]
3-	Loop Problems	[21 problems]
4-	String Problems	[22 problems]
5-	List Problems	[40 problems]

Let's STARTUP

Lecture Agenda

Section 1: Basic Operator Problems

Section 2: Condition Problems

Section 3: Loop Problems

Section 4: String Problems

Section 5: List Problems

Basic Operator Problems

[01] CF-Round 327:   http://codeforces.com/problemset/problem/591/A

[02] CF-Round 332:   http://codeforces.com/problemset/problem/599/A

[03] CF-Round 125:   http://codeforces.com/problemset/problem/199/A

[04] CF-Round 350:   http://codeforces.com/problemset/problem/670/A

[05] CF-Round 123:   http://codeforces.com/problemset/problem/195/A

Basic Operator Problems Solution

[01]   CF-Round 327:   http://codeforces.com/contest/591/submission/30936968

[02]   CF-Round 332:   http://codeforces.com/contest/599/submission/30728573

[03]   CF-Round 125:   http://codeforces.com/contest/199/submission/26970850

[04]   CF-Round 350:   http://codeforces.com/contest/670/submission/30936450

[05]   CF-Round 123:   http://codeforces.com/contest/195/submission/26694589

Lecture Agenda

✓ Section 1: Basic Operator Problems

Section 2: Condition Problems

Section 3: Loop Problems

Section 4: String Problems

Section 5: List Problems

Condition Problems

[01] CF-Round 285: http://codeforces.com/problemset/problem/501/A

[02] CF-Round 337: http://codeforces.com/problemset/problem/610/A

[03] CF-Round 362: http://codeforces.com/problemset/problem/697/A

[04] CF-Round 396: http://codeforces.com/problemset/problem/766/A

[05] CF-Round 195: http://codeforces.com/problemset/problem/336/A

[06] CF-Round 206: http://codeforces.com/problemset/problem/355/A

[07] CF-Round 274: http://codeforces.com/problemset/problem/479/A

[08] CF-Round 292: http://codeforces.com/problemset/problem/515/A

[09] CF-Round 324: http://codeforces.com/problemset/problem/584/A

[10] CF-Round 346: http://codeforces.com/problemset/problem/659/A

[11] CF-Round 349: http://codeforces.com/problemset/problem/667/A

Condition Problems Solution

[01] CF-Round 285: http://codeforces.com/contest/501/submission/30936918

[02] CF-Round 337: http://codeforces.com/contest/610/submission/26635253

[03] CF-Round 362: http://codeforces.com/contest/697/submission/26638485

[04] CF-Round 396: http://codeforces.com/contest/766/submission/29097738

[05] CF-Round 195: http://codeforces.com/contest/336/submission/26639690

[06] CF-Round 206: http://codeforces.com/contest/355/submission/46033501

[07] CF-Round 274: http://codeforces.com/contest/479/submission/26635858

[08] CF-Round 292: http://codeforces.com/contest/515/submission/30743791

[09] CF-Round 324: http://codeforces.com/contest/584/submission/26636790

[10] CF-Round 346: http://codeforces.com/contest/659/submission/26635437

[11] CF-Round 349: http://codeforces.com/contest/667/submission/31127804

Lecture Agenda

✓ Section 1: Basic Operator Problems

✓ Section 2: Condition Problems

Section 3: Loop Problems

Section 4: String Problems

Section 5: List Problems

Loop Problems

[01] CF-Round 122: http://codeforces.com/problemset/problem/194/A

[02] CF-Round 131: http://codeforces.com/problemset/problem/214/A

[03] CF-Round 136: http://codeforces.com/problemset/problem/221/A

[04] CF-Round 151: http://codeforces.com/problemset/problem/246/A

[05] CF-Round 169: http://codeforces.com/problemset/problem/276/A

[06] CF-Round 194: http://codeforces.com/problemset/problem/334/A

[07] CF-Round 262: http://codeforces.com/problemset/problem/460/A

[08] CF-Round 320: http://codeforces.com/problemset/problem/579/A

[09] CF-Round 326: http://codeforces.com/problemset/problem/588/A

[10] CF-Round 383: http://codeforces.com/problemset/problem/742/A

[11] CF-Round 387: http://codeforces.com/problemset/problem/747/A

[12] CF-Round 175: http://codeforces.com/problemset/problem/285/A

[13] CF-Round 177: http://codeforces.com/problemset/problem/289/A

[14] CF-Round 190: http://codeforces.com/problemset/problem/322/A

[15] CF-Round 214: http://codeforces.com/problemset/problem/366/A

[16] CF-Round 272: http://codeforces.com/problemset/problem/476/A

Loop Problems Solution

[01]   CF-Round 122:   http://codeforces.com/contest/194/submission/26967861

[02]   CF-Round 131:   http://codeforces.com/contest/214/submission/30908605

[03]   CF-Round 136:   http://codeforces.com/contest/221/submission/26783287

[04]   CF-Round 151:   http://codeforces.com/contest/246/submission/46012109

[05]   CF-Round 169:   http://codeforces.com/contest/276/submission/30934952

[06]   CF-Round 194:   http://codeforces.com/contest/334/submission/46032792

[07]   CF-Round 262:   http://codeforces.com/contest/460/submission/30492265

[08]   CF-Round 320:   http://codeforces.com/contest/579/submission/30728457

[09]   CF-Round 326:   http://codeforces.com/contest/588/submission/30730515

[10]   CF-Round 383:   http://codeforces.com/contest/742/submission/30783390

[11]   CF-Round 387:   http://codeforces.com/contest/747/submission/46635157

[12]   CF-Round 175:   http://codeforces.com/contest/285/submission/46012347

[13]   CF-Round 177:   http://codeforces.com/contest/289/submission/46195645

[14]   CF-Round 190:   http://codeforces.com/contest/322/submission/46012475

[15]   CF-Round 214:   http://codeforces.com/contest/366/submission/46195993

[16]   CF-Round 272:   http://codeforces.com/contest/476/submission/26767474

Loop Problems

[17] CF-Round 275: http://codeforces.com/problemset/problem/483/A

[18] CF-Round 296: http://codeforces.com/problemset/problem/527/A

[19] CF-Round 298: http://codeforces.com/problemset/problem/534/A

[20] CF-Round 308: http://codeforces.com/problemset/problem/552/A

[21] CF-Round 319: http://codeforces.com/problemset/problem/577/A

Loop Problems Solution

[17]   CF-Round 275:   http://codeforces.com/contest/483/submission/46056327

[18]   CF-Round 296:   http://codeforces.com/contest/527/submission/26776110

[19]   CF-Round 298:   http://codeforces.com/contest/534/submission/46057203

[20]   CF-Round 308:   http://codeforces.com/contest/552/submission/26780893

[21]   CF-Round 319:   http://codeforces.com/contest/577/submission/26970672

Lecture Agenda

✓ Section 1: Basic Operator Problems

✓ Section 2: Condition Problems

✓ Section 3: Loop Problems

Section 4: String Problems

Section 5: List Problems

String Problems

[01] CF-Round 219:   http://codeforces.com/problemset/problem/373/A

[02] CF-Round 221:   http://codeforces.com/problemset/problem/376/A

[03] CF-Round 227:   http://codeforces.com/problemset/problem/387/A

[04] CF-Round 234:   http://codeforces.com/problemset/problem/400/A

[05] CF-Round 242:   http://codeforces.com/problemset/problem/424/A

[06] CF-Round 271:   http://codeforces.com/problemset/problem/474/A

[07] CF-Round 378:   http://codeforces.com/problemset/problem/733/A

[08] CF-Round 380:   http://codeforces.com/problemset/problem/738/A

[09] CF-Round 382:   http://codeforces.com/problemset/problem/735/A

[10] CF-Round 130:   http://codeforces.com/problemset/problem/208/A

[11] CF-Round 135:   http://codeforces.com/problemset/problem/219/A

[12] CF-Round 157:   http://codeforces.com/problemset/problem/259/A

[13] CF-Round 213:   http://codeforces.com/problemset/problem/365/A

[14] CF-Round 224:   http://codeforces.com/problemset/problem/382/A

[15] CF-Round 237:   http://codeforces.com/problemset/problem/404/A

[16] CF-Round 278:   http://codeforces.com/problemset/problem/488/A

String Problems Solution

[01] CF-Round 219: http://codeforces.com/contest/373/submission/46199703

[02] CF-Round 221: http://codeforces.com/contest/376/submission/46201590

[03] CF-Round 227: http://codeforces.com/contest/387/submission/46202030

[04] CF-Round 234: http://codeforces.com/contest/400/submission/46202261

[05] CF-Round 242: http://codeforces.com/contest/424/submission/46203655

[06] CF-Round 271: http://codeforces.com/contest/474/submission/30728395

[07] CF-Round 378: http://codeforces.com/contest/733/submission/30285449

[08] CF-Round 380: http://codeforces.com/contest/738/submission/46815704

[09] CF-Round 382: http://codeforces.com/contest/735/submission/46637036

[10] CF-Round 130: http://codeforces.com/contest/208/submission/29096741

[11] CF-Round 135: http://codeforces.com/contest/219/submission/46197090

[12] CF-Round 157: http://codeforces.com/contest/259/submission/46198519

[13] CF-Round 213: http://codeforces.com/contest/365/submission/46199266

[14] CF-Round 224: http://codeforces.com/contest/382/submission/46201771

[15] CF-Round 237: http://codeforces.com/contest/404/submission/46203422

[16] CF-Round 278: http://codeforces.com/contest/488/submission/46056684

String Problems

[17] CF-Round 294: http://codeforces.com/problemset/problem/519/A

[18] CF-Round 302: http://codeforces.com/problemset/problem/544/A

[19] CF-Round 310: http://codeforces.com/problemset/problem/556/A

[20] CF-Round 391: http://codeforces.com/problemset/problem/757/A

[21] CF-Round 118: http://codeforces.com/problemset/problem/186/A

[22] CF-Round 145: http://codeforces.com/problemset/problem/234/A

String Problems Solution

[17] CF-Round 294: http://codeforces.com/contest/519/submission/30743083

[18] CF-Round 302: http://codeforces.com/contest/544/submission/46205586

[19] CF-Round 310: http://codeforces.com/contest/556/submission/30728136

[20] CF-Round 391: http://codeforces.com/contest/757/submission/46815398

[21] CF-Round 118: http://codeforces.com/contest/186/submission/29099327

[22] CF-Round 145: http://codeforces.com/contest/234/submission/46821283

Lecture Agenda

✓ Section 1: Basic Operator Problems

✓ Section 2: Condition Problems

✓ Section 3: Loop Problems

✓ Section 4: String Problems

Section 5: List Problems

List Problems

[01] CF-Round 211: http://codeforces.com/problemset/problem/363/A

[02] CF-Round 216: http://codeforces.com/problemset/problem/369/A

[03] CF-Round 238: http://codeforces.com/problemset/problem/405/A

[04] CF-Round 252: http://codeforces.com/problemset/problem/441/A

[05] CF-Round 257: http://codeforces.com/problemset/problem/450/A

[06] CF-Round 268: http://codeforces.com/problemset/problem/469/A

[07] CF-Round 283: http://codeforces.com/problemset/problem/496/A

[08] CF-Round 303: http://codeforces.com/problemset/problem/545/A

[09] CF-Round 307: http://codeforces.com/problemset/problem/551/A

[10] CF-Round 314: http://codeforces.com/problemset/problem/567/A

[11] CF-Round 317: http://codeforces.com/problemset/problem/572/A

[12] CF-Round 321: http://codeforces.com/problemset/problem/580/A

[13] CF-Round 323: http://codeforces.com/problemset/problem/583/A

[14] CF-Round 334: http://codeforces.com/problemset/problem/604/A

[15] CF-Round 341: http://codeforces.com/problemset/problem/621/A

[16] CF-Round 344: http://codeforces.com/problemset/problem/631/A

List Problems Solution

[01] CF-Round 211: http://codeforces.com/contest/363/submission/46053722

[02] CF-Round 216: http://codeforces.com/contest/369/submission/46511588

[03] CF-Round 238: http://codeforces.com/contest/405/submission/30547317

[04] CF-Round 252: http://codeforces.com/contest/441/submission/30909860

[05] CF-Round 257: http://codeforces.com/contest/450/submission/30914304

[06] CF-Round 268: http://codeforces.com/contest/469/submission/30492134

[07] CF-Round 283: http://codeforces.com/contest/496/submission/46476213

[08] CF-Round 303: http://codeforces.com/contest/545/submission/46358815

[09] CF-Round 307: http://codeforces.com/contest/551/submission/30785206

[10] CF-Round 314: http://codeforces.com/contest/567/submission/46816257

[11] CF-Round 317: http://codeforces.com/contest/572/submission/30914067

[12] CF-Round 321: http://codeforces.com/contest/580/submission/30448413

[13] CF-Round 323: http://codeforces.com/contest/583/submission/30786853

[14] CF-Round 334: http://codeforces.com/contest/604/submission/46062573

[15] CF-Round 341: http://codeforces.com/contest/621/submission/30758783

[16] CF-Round 344: http://codeforces.com/contest/631/submission/46357823

List Problems

[17]   CF-Round 354:   http://codeforces.com/problemset/problem/676/A

[18]   CF-Round 363:   http://codeforces.com/problemset/problem/699/A

[19]   CF-Round 368:   http://codeforces.com/problemset/problem/707/A

[20]   CF-Round 399:   http://codeforces.com/problemset/problem/768/A

[21]   CF-Round 106:   http://codeforces.com/problemset/problem/149/A

[22]   CF-Round 108:   http://codeforces.com/problemset/problem/152/A

[23]   CF-Round 110:   http://codeforces.com/problemset/problem/157/A

[24]   CF-Round 112:   http://codeforces.com/problemset/problem/165/A

[25]   CF-Round 134:   http://codeforces.com/problemset/problem/218/A

[26]   CF-Round 149:   http://codeforces.com/problemset/problem/242/A

[27]   CF-Round 179:   http://codeforces.com/problemset/problem/296/A

[28]   CF-Round 182:   http://codeforces.com/problemset/problem/302/A

[29]   CF-Round 204:   http://codeforces.com/problemset/problem/352/A

[30]   CF-Round 209:   http://codeforces.com/problemset/problem/359/A

[31]   CF-Round 215:   http://codeforces.com/problemset/problem/368/A

[32]   CF-Round 226:   http://codeforces.com/problemset/problem/385/A

List Problems Solution

[17] CF-Round 354: http://codeforces.com/contest/676/submission/30934861

[18] CF-Round 363: http://codeforces.com/contest/699/submission/46356848

[19] CF-Round 368: http://codeforces.com/contest/707/submission/30698174

[20] CF-Round 399: http://codeforces.com/contest/768/submission/46814994

[21] CF-Round 106: http://codeforces.com/contest/149/submission/30728979

[22] CF-Round 108: http://codeforces.com/contest/152/submission/46637584

[23] CF-Round 110: http://codeforces.com/contest/157/submission/46588469

[24] CF-Round 112: http://codeforces.com/contest/165/submission/46588290

[25] CF-Round 134: http://codeforces.com/contest/218/submission/46354312

[26] CF-Round 149: http://codeforces.com/contest/242/submission/46195480

[27] CF-Round 179: http://codeforces.com/contest/296/submission/46573238

[28] CF-Round 182: http://codeforces.com/contest/302/submission/46572638

[29] CF-Round 204: http://codeforces.com/contest/352/submission/46515362

[30] CF-Round 209: http://codeforces.com/contest/359/submission/46514016

[31] CF-Round 215: http://codeforces.com/contest/368/submission/46513937

[32] CF-Round 226: http://codeforces.com/contest/385/submission/46511323

List Problems

[33]   CF-Round 228:   http://codeforces.com/problemset/problem/389/A

[34]   CF-Round 249:   http://codeforces.com/problemset/problem/435/A

[35]   CF-Round 251:   http://codeforces.com/problemset/problem/439/A

[36]   CF-Round 263:   http://codeforces.com/problemset/problem/462/A

[37]   CF-Round 284:   http://codeforces.com/problemset/problem/499/A

[38]   CF-Round 287:   http://codeforces.com/problemset/problem/507/A

[39]   CF-Round 299:   http://codeforces.com/problemset/problem/535/A

[40]   CF-Round 313:   http://codeforces.com/problemset/problem/560/A

List Problems Solution

[33]   CF-Round 228:   http://codeforces.com/contest/389/submission/46510858

[34]   CF-Round 249:   http://codeforces.com/contest/435/submission/46483044

[35]   CF-Round 251:   http://codeforces.com/contest/439/submission/30748711

[36]   CF-Round 263:   http://codeforces.com/contest/462/submission/30936093

[37]   CF-Round 284:   http://codeforces.com/contest/499/submission/46470948

[38]   CF-Round 287:   http://codeforces.com/contest/507/submission/30907897

[39]   CF-Round 299:   http://codeforces.com/contest/535/submission/45915669

[40]   CF-Round 313:   http://codeforces.com/contest/560/submission/30786326

Lecture Agenda

✓ Section 1: Basic Operator Problems

✓ Section 2: Condition Problems

✓ Section 3: Loop Problems

✓ Section 4: String Problems

✓ Section 5: List Problems