Python 3.6.3 |Anaconda, Inc.| (default, Oct 13 2017, 12:02:49)

[GCC 7.2.0] on linux

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>>>

===== RESTART: /home/cserv1\_a/soc\_msc/ml16m6y/Downloads/schooling\_S4.py =====

Testing average cycles for attraction strength 1.4

Number of cycles run: 527

Number of cycles run: 1879

Number of cycles run: 2198

Number of cycles run: 3114

Number of cycles run: 7250

Number of cycles run: 16203

Number of cycles run: 1214

Number of cycles run: 1035

Number of cycles run: 2251

Number of cycles run: 2486

Number of cycles run: 2376

Number of cycles run: 2443

Number of cycles run: 19415

Number of cycles run: 6503

Number of cycles run: 18828

Number of cycles run: 3123

Number of cycles run: 3025

Number of cycles run: 933

Number of cycles run: 1372

Number of cycles run: 1859

Number of cycles run: 1129

Number of cycles run: 2977

Number of cycles run: 1892

Number of cycles run: 3707

Number of cycles run: 5110

Number of cycles run: 3114

Number of cycles run: 3650

Number of cycles run: 50000

Number of cycles run: 4875

Number of cycles run: 617

Number of cycles run: 2632

Number of cycles run: 23769

Number of cycles run: 4218

Number of cycles run: 1631

Number of cycles run: 29837

Number of cycles run: 22928

Number of cycles run: 3089

Number of cycles run: 1787

Number of cycles run: 29200

Number of cycles run: 1430

Number of cycles run: 27063

Number of cycles run: 1897

Number of cycles run: 1337

Number of cycles run: 11135

Number of cycles run: 3607

Number of cycles run: 4212

Number of cycles run: 2465

Number of cycles run: 1446

Number of cycles run: 3073

Number of cycles run: 2604

Number of cycles run: 4865

Number of cycles run: 2711

Number of cycles run: 34886

Number of cycles run: 1392

Number of cycles run: 5837

Number of cycles run: 4255

Number of cycles run: 2888

Number of cycles run: 50000

Number of cycles run: 3527

Number of cycles run: 2363

Number of cycles run: 2899

Number of cycles run: 3330

Number of cycles run: 5100

Number of cycles run: 4476

Number of cycles run: 1813

Number of cycles run: 2079

Number of cycles run: 8416

Number of cycles run: 1928

Number of cycles run: 2107

Number of cycles run: 7002

Number of cycles run: 7529

Number of cycles run: 2330

Number of cycles run: 3400

Number of cycles run: 3611

Number of cycles run: 5964

Number of cycles run: 7765

Number of cycles run: 4807

Number of cycles run: 2285

Number of cycles run: 1934

Number of cycles run: 4672

Number of cycles run: 2625

Number of cycles run: 3182

Number of cycles run: 3454

Number of cycles run: 3480

Number of cycles run: 2104

Number of cycles run: 1510

Number of cycles run: 16939

Number of cycles run: 838

Number of cycles run: 9516

Number of cycles run: 2483

Number of cycles run: 3610

Number of cycles run: 3155

Number of cycles run: 651

Number of cycles run: 1228

Number of cycles run: 3283

Number of cycles run: 3713

Number of cycles run: 1958

Number of cycles run: 460

Number of cycles run: 1303

Number of cycles run: 2877

Av cycles for attraction strength 1.4 is 6190

standard diviation is 9255.71217826

Testing average cycles for attraction strength 1.4

Number of cycles run: 1854

Number of cycles run: 2508

Number of cycles run: 4211

Number of cycles run: 1920

Number of cycles run: 2487

Number of cycles run: 3667

Number of cycles run: 1956

Number of cycles run: 15731

Number of cycles run: 1976

Number of cycles run: 2089

Number of cycles run: 2394

Number of cycles run: 2818

Number of cycles run: 5126

Number of cycles run: 431

Number of cycles run: 1066

Number of cycles run: 4360

Number of cycles run: 4056

Number of cycles run: 1335

Number of cycles run: 2167

Number of cycles run: 2046

Number of cycles run: 1689

Number of cycles run: 5406

Number of cycles run: 2613

Number of cycles run: 3977

Number of cycles run: 2560

Number of cycles run: 7846

Number of cycles run: 1373

Number of cycles run: 4028

Number of cycles run: 1631

Number of cycles run: 5708

Number of cycles run: 3698

Number of cycles run: 1286

Number of cycles run: 1292

Number of cycles run: 857

Number of cycles run: 4757

Number of cycles run: 727

Number of cycles run: 6313

Number of cycles run: 1130

Number of cycles run: 1486

Number of cycles run: 3677

Number of cycles run: 643

Number of cycles run: 1760

Number of cycles run: 2832

Number of cycles run: 7656

Number of cycles run: 1509

Number of cycles run: 3645

Number of cycles run: 4465

Number of cycles run: 1969

Number of cycles run: 1598

Number of cycles run: 2306

Number of cycles run: 2128

Number of cycles run: 1683

Number of cycles run: 734

Number of cycles run: 6485

Number of cycles run: 50000

Number of cycles run: 1226

Number of cycles run: 600

Number of cycles run: 50000

Number of cycles run: 2784

Number of cycles run: 1009

Number of cycles run: 8221

Number of cycles run: 1305

Number of cycles run: 1594

Number of cycles run: 3669

Number of cycles run: 2127

Number of cycles run: 4741

Number of cycles run: 3020

Number of cycles run: 2112

Number of cycles run: 812

Number of cycles run: 7350

Number of cycles run: 3257

Number of cycles run: 1685

Number of cycles run: 2635

Number of cycles run: 2669

Number of cycles run: 50000

Number of cycles run: 8433

Number of cycles run: 38097

Number of cycles run: 2972

Number of cycles run: 2864

Number of cycles run: 1343

Number of cycles run: 2791

Number of cycles run: 10323

Number of cycles run: 5366

Number of cycles run: 16432

Number of cycles run: 1195

Number of cycles run: 11118

Number of cycles run: 14209

Number of cycles run: 3069

Number of cycles run: 783

Number of cycles run: 2584

Number of cycles run: 16201

Number of cycles run: 625

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 6001

Number of cycles run: 4469

Number of cycles run: 2272

Number of cycles run: 2840

Number of cycles run: 50000

Number of cycles run: 728

Av cycles for attraction strength 1.4 is 6711

standard diviation is 11969.4128696

Testing average cycles for attraction strength 1.4

Number of cycles run: 50000

Number of cycles run: 2582

Number of cycles run: 4004

Number of cycles run: 9905

Number of cycles run: 3362

Number of cycles run: 1444

Number of cycles run: 3127

Number of cycles run: 50000

Number of cycles run: 741

Number of cycles run: 1443

Number of cycles run: 10826

Number of cycles run: 450

Number of cycles run: 1934

Number of cycles run: 753

Number of cycles run: 4931

Number of cycles run: 7186

Number of cycles run: 440

Number of cycles run: 13539

Number of cycles run: 2932

Number of cycles run: 2448

Number of cycles run: 571

Number of cycles run: 3566

Number of cycles run: 4449

Number of cycles run: 2401

Number of cycles run: 1128

Number of cycles run: 3716

Number of cycles run: 3196

Number of cycles run: 10475

Number of cycles run: 2744

Number of cycles run: 3078

Number of cycles run: 1874

Number of cycles run: 50000

Number of cycles run: 2658

Number of cycles run: 1351

Number of cycles run: 706

Number of cycles run: 2348

Number of cycles run: 2567

Number of cycles run: 459

Number of cycles run: 2323

Number of cycles run: 1497

Number of cycles run: 5041

Number of cycles run: 7721

Number of cycles run: 3065

Number of cycles run: 4925

Number of cycles run: 596

Number of cycles run: 2455

Number of cycles run: 1287

Number of cycles run: 3511

Number of cycles run: 1905

Number of cycles run: 4574

Number of cycles run: 460

Number of cycles run: 2256

Number of cycles run: 6081

Number of cycles run: 1825

Number of cycles run: 4121

Number of cycles run: 4060

Number of cycles run: 4743

Number of cycles run: 2586

Number of cycles run: 469

Number of cycles run: 527

Number of cycles run: 1734

Number of cycles run: 3774

Number of cycles run: 3371

Number of cycles run: 1111

Number of cycles run: 3689

Number of cycles run: 1240

Number of cycles run: 50000

Number of cycles run: 2563

Number of cycles run: 2209

Number of cycles run: 50000

Number of cycles run: 2165

Number of cycles run: 1452

Number of cycles run: 1638

Number of cycles run: 1114

Number of cycles run: 3510

Number of cycles run: 1455

Number of cycles run: 4358

Number of cycles run: 3413

Number of cycles run: 1193

Number of cycles run: 8692

Number of cycles run: 3177

Number of cycles run: 2834

Number of cycles run: 6579

Number of cycles run: 2514

Number of cycles run: 816

Number of cycles run: 1703

Number of cycles run: 768

Number of cycles run: 2263

Number of cycles run: 2582

Number of cycles run: 1421

Number of cycles run: 1839

Number of cycles run: 5253

Number of cycles run: 50000

Number of cycles run: 1020

Number of cycles run: 810

Number of cycles run: 2092

Number of cycles run: 50000

Number of cycles run: 1940

Number of cycles run: 467

Number of cycles run: 681

Av cycles for attraction strength 1.4 is 6228

standard diviation is 12299.1996635

Testing average cycles for attraction strength 1.4

Number of cycles run: 1277

Number of cycles run: 4862

Number of cycles run: 1343

Number of cycles run: 2548

Number of cycles run: 2134

Number of cycles run: 2285

Number of cycles run: 3112

Number of cycles run: 1454

Number of cycles run: 1113

Number of cycles run: 854

Number of cycles run: 1350

Number of cycles run: 457

Number of cycles run: 2947

Number of cycles run: 2516

Number of cycles run: 2034

Number of cycles run: 2241

Number of cycles run: 3493

Number of cycles run: 11322

Number of cycles run: 1753

Number of cycles run: 3616

Number of cycles run: 10915

Number of cycles run: 456

Number of cycles run: 50000

Number of cycles run: 41197

Number of cycles run: 2279

Number of cycles run: 1694

Number of cycles run: 2439

Number of cycles run: 4224

Number of cycles run: 1050

Number of cycles run: 3944

Number of cycles run: 4613

Number of cycles run: 1297

Number of cycles run: 3738

Number of cycles run: 2449

Number of cycles run: 729

Number of cycles run: 2957

Number of cycles run: 470

Number of cycles run: 1714

Number of cycles run: 3313

Number of cycles run: 50000

Number of cycles run: 4253

Number of cycles run: 1952

Number of cycles run: 726

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 1265

Number of cycles run: 3438

Number of cycles run: 1989

Number of cycles run: 4936

Number of cycles run: 2431

Number of cycles run: 37528

Number of cycles run: 2659

Number of cycles run: 2922

Number of cycles run: 839

Number of cycles run: 5659

Number of cycles run: 2594

Number of cycles run: 1067

Number of cycles run: 474

Number of cycles run: 549

Number of cycles run: 1187

Number of cycles run: 2176

Number of cycles run: 4847

Number of cycles run: 2865

Number of cycles run: 457

Number of cycles run: 40548

Number of cycles run: 842

Number of cycles run: 4168

Number of cycles run: 2906

Number of cycles run: 3713

Number of cycles run: 50000

Number of cycles run: 4352

Number of cycles run: 504

Number of cycles run: 2291

Number of cycles run: 2689

Number of cycles run: 1480

Number of cycles run: 1555

Number of cycles run: 447

Number of cycles run: 8286

Number of cycles run: 44470

Number of cycles run: 2099

Number of cycles run: 1925

Number of cycles run: 2118

Number of cycles run: 2073

Number of cycles run: 896

Number of cycles run: 2042

Number of cycles run: 8258

Number of cycles run: 32805

Number of cycles run: 464

Number of cycles run: 1703

Number of cycles run: 1117

Number of cycles run: 4937

Number of cycles run: 1364

Number of cycles run: 894

Number of cycles run: 1910

Number of cycles run: 4776

Number of cycles run: 572

Number of cycles run: 4357

Number of cycles run: 2880

Number of cycles run: 829

Number of cycles run: 1335

Av cycles for attraction strength 1.4 is 6766

standard diviation is 12983.2119333

Testing average cycles for attraction strength 1.4

Number of cycles run: 1686

Number of cycles run: 1250

Number of cycles run: 2561

Number of cycles run: 11025

Number of cycles run: 957

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 781

Number of cycles run: 2978

Number of cycles run: 1709

Number of cycles run: 866

Number of cycles run: 6763

Number of cycles run: 13728

Number of cycles run: 11288

Number of cycles run: 1440

Number of cycles run: 1508

Number of cycles run: 12590

Number of cycles run: 5907

Number of cycles run: 1084

Number of cycles run: 1479

Number of cycles run: 3815

Number of cycles run: 2602

Number of cycles run: 3440

Number of cycles run: 3172

Number of cycles run: 5109

Number of cycles run: 7870

Number of cycles run: 2237

Number of cycles run: 870

Number of cycles run: 19783

Number of cycles run: 976

Number of cycles run: 1247

Number of cycles run: 7435

Number of cycles run: 1823

Number of cycles run: 988

Number of cycles run: 4726

Number of cycles run: 2275

Number of cycles run: 1870

Number of cycles run: 5638

Number of cycles run: 3552

Number of cycles run: 4588

Number of cycles run: 2352

Number of cycles run: 2577

Number of cycles run: 2245

Number of cycles run: 863

Number of cycles run: 2776

Number of cycles run: 3676

Number of cycles run: 1744

Number of cycles run: 865

Number of cycles run: 3284

Number of cycles run: 3617

Number of cycles run: 438

Number of cycles run: 938

Number of cycles run: 1757

Number of cycles run: 3433

Number of cycles run: 2787

Number of cycles run: 4247

Number of cycles run: 3491

Number of cycles run: 2014

Number of cycles run: 1420

Number of cycles run: 2784

Number of cycles run: 5589

Number of cycles run: 2047

Number of cycles run: 24657

Number of cycles run: 2767

Number of cycles run: 812

Number of cycles run: 50000

Number of cycles run: 4500

Number of cycles run: 3339

Number of cycles run: 5625

Number of cycles run: 6719

Number of cycles run: 1923

Number of cycles run: 5373

Number of cycles run: 2377

Number of cycles run: 2023

Number of cycles run: 3195

Number of cycles run: 5466

Number of cycles run: 1271

Number of cycles run: 1625

Number of cycles run: 3727

Number of cycles run: 455

Number of cycles run: 2278

Number of cycles run: 962

Number of cycles run: 3112

Number of cycles run: 1812

Number of cycles run: 4057

Number of cycles run: 2638

Number of cycles run: 1989

Number of cycles run: 4567

Number of cycles run: 1928

Number of cycles run: 49823

Number of cycles run: 4451

Number of cycles run: 616

Number of cycles run: 1546

Number of cycles run: 3769

Number of cycles run: 3620

Number of cycles run: 2877

Number of cycles run: 4959

Number of cycles run: 408

Number of cycles run: 4269

Number of cycles run: 8878

Av cycles for attraction strength 1.4 is 5529

standard diviation is 9830.38818952

Testing average cycles for attraction strength 1.4

Number of cycles run: 50000

Number of cycles run: 2266

Number of cycles run: 1796

Number of cycles run: 13550

Number of cycles run: 3201

Number of cycles run: 43476

Number of cycles run: 4052

Number of cycles run: 1321

Number of cycles run: 4017

Number of cycles run: 2553

Number of cycles run: 4753

Number of cycles run: 1130

Number of cycles run: 455

Number of cycles run: 3653

Number of cycles run: 1173

Number of cycles run: 8952

Number of cycles run: 638

Number of cycles run: 568

Number of cycles run: 2148

Number of cycles run: 1727

Number of cycles run: 3423

Number of cycles run: 4279

Number of cycles run: 1555

Number of cycles run: 3986

Number of cycles run: 1451

Number of cycles run: 5663

Number of cycles run: 1328

Number of cycles run: 1175

Number of cycles run: 3922

Number of cycles run: 9338

Number of cycles run: 4023

Number of cycles run: 5729

Number of cycles run: 7096

Number of cycles run: 2832

Number of cycles run: 6487

Number of cycles run: 1566

Number of cycles run: 1801

Number of cycles run: 2838

Number of cycles run: 5459

Number of cycles run: 2179

Number of cycles run: 3876

Number of cycles run: 1893

Number of cycles run: 2042

Number of cycles run: 2804

Number of cycles run: 3267

Number of cycles run: 3233

Number of cycles run: 1690

Number of cycles run: 1427

Number of cycles run: 1816

Number of cycles run: 461

Number of cycles run: 1408

Number of cycles run: 1738

Number of cycles run: 4197

Number of cycles run: 7124

Number of cycles run: 770

Number of cycles run: 901

Number of cycles run: 13709

Number of cycles run: 2955

Number of cycles run: 2375

Number of cycles run: 5466

Number of cycles run: 2442

Number of cycles run: 1014

Number of cycles run: 35295

Number of cycles run: 3732

Number of cycles run: 924

Number of cycles run: 3038

Number of cycles run: 4335

Number of cycles run: 550

Number of cycles run: 711

Number of cycles run: 3662

Number of cycles run: 50000

Number of cycles run: 448

Number of cycles run: 3807

Number of cycles run: 460

Number of cycles run: 4476

Number of cycles run: 10724

Number of cycles run: 473

Number of cycles run: 50000

Number of cycles run: 7622

Number of cycles run: 638

Number of cycles run: 4067

Number of cycles run: 12486

Number of cycles run: 3529

Number of cycles run: 3852

Number of cycles run: 4058

Number of cycles run: 2559

Number of cycles run: 4053

Number of cycles run: 3249

Number of cycles run: 869

Number of cycles run: 420

Number of cycles run: 1225

Number of cycles run: 4272

Number of cycles run: 463

Number of cycles run: 1149

Number of cycles run: 2375

Number of cycles run: 4402

Number of cycles run: 2966

Number of cycles run: 5991

Number of cycles run: 4808

Number of cycles run: 3242

Av cycles for attraction strength 1.4 is 5450

standard diviation is 9762.8261375

Testing average cycles for attraction strength 1.4

Number of cycles run: 1191

Number of cycles run: 10072

Number of cycles run: 964

Number of cycles run: 29064

Number of cycles run: 8537

Number of cycles run: 3121

Number of cycles run: 5863

Number of cycles run: 1823

Number of cycles run: 9926

Number of cycles run: 6286

Number of cycles run: 613

Number of cycles run: 626

Number of cycles run: 2705

Number of cycles run: 2635

Number of cycles run: 1019

Number of cycles run: 50000

Number of cycles run: 1350

Number of cycles run: 3727

Number of cycles run: 831

Number of cycles run: 1757

Number of cycles run: 1797

Number of cycles run: 849

Number of cycles run: 7464

Number of cycles run: 3693

Number of cycles run: 2274

Number of cycles run: 2436

Number of cycles run: 12426

Number of cycles run: 5938

Number of cycles run: 50000

Number of cycles run: 423

Number of cycles run: 1840

Number of cycles run: 4057

Number of cycles run: 7061

Number of cycles run: 5377

Number of cycles run: 3589

Number of cycles run: 4301

Number of cycles run: 1930

Number of cycles run: 2980

Number of cycles run: 1270

Number of cycles run: 10681

Number of cycles run: 503

Number of cycles run: 3301

Number of cycles run: 749

Number of cycles run: 464

Number of cycles run: 3499

Number of cycles run: 2501

Number of cycles run: 2917

Number of cycles run: 3176

Number of cycles run: 3776

Number of cycles run: 28114

Number of cycles run: 10942

Number of cycles run: 933

Number of cycles run: 5929

Number of cycles run: 1823

Number of cycles run: 2855

Number of cycles run: 12549

Number of cycles run: 1122

Number of cycles run: 4803

Number of cycles run: 2141

Number of cycles run: 1881

Number of cycles run: 6453

Number of cycles run: 4609

Number of cycles run: 4761

Number of cycles run: 6347

Number of cycles run: 2034

Number of cycles run: 50000

Number of cycles run: 1984

Number of cycles run: 45640

Number of cycles run: 3225

Number of cycles run: 2157

Number of cycles run: 2786

Number of cycles run: 4591

Number of cycles run: 1616

Number of cycles run: 2681

Number of cycles run: 3195

Number of cycles run: 22743

Number of cycles run: 23575

Number of cycles run: 2815

Number of cycles run: 4059

Number of cycles run: 2202

Number of cycles run: 26513

Number of cycles run: 452

Number of cycles run: 2267

Number of cycles run: 50000

Number of cycles run: 2297

Number of cycles run: 463

Number of cycles run: 1359

Number of cycles run: 2247

Number of cycles run: 50000

Number of cycles run: 2579

Number of cycles run: 1440

Number of cycles run: 28937

Number of cycles run: 1157

Number of cycles run: 2338

Number of cycles run: 16826

Number of cycles run: 1875

Number of cycles run: 3847

Number of cycles run: 1113

Number of cycles run: 2764

Number of cycles run: 888

Av cycles for attraction strength 1.4 is 7633

standard diviation is 12279.2126167

Testing average cycles for attraction strength 1.4

Number of cycles run: 5965

Number of cycles run: 18153

Number of cycles run: 4645

Number of cycles run: 50000

Number of cycles run: 1364

Number of cycles run: 6970

Number of cycles run: 2343

Number of cycles run: 4008

Number of cycles run: 3466

Number of cycles run: 15840

Number of cycles run: 1076

Number of cycles run: 517

Number of cycles run: 2903

Number of cycles run: 5667

Number of cycles run: 7265

Number of cycles run: 456

Number of cycles run: 2204

Number of cycles run: 1472

Number of cycles run: 2115

Number of cycles run: 1141

Number of cycles run: 2266

Number of cycles run: 3629

Number of cycles run: 10849

Number of cycles run: 2775

Number of cycles run: 1643

Number of cycles run: 3541

Number of cycles run: 3046

Number of cycles run: 6538

Number of cycles run: 1011

Number of cycles run: 2115

Number of cycles run: 33179

Number of cycles run: 1720

Number of cycles run: 600

Number of cycles run: 2990

Number of cycles run: 4134

Number of cycles run: 14418

Number of cycles run: 1348

Number of cycles run: 6693

Number of cycles run: 50000

Number of cycles run: 5444

Number of cycles run: 3098

Number of cycles run: 24115

Number of cycles run: 14359

Number of cycles run: 2254

Number of cycles run: 2067

Number of cycles run: 1555

Number of cycles run: 11102

Number of cycles run: 3508

Number of cycles run: 3104

Number of cycles run: 2259

Number of cycles run: 2785

Number of cycles run: 2178

Number of cycles run: 1446

Number of cycles run: 1179

Number of cycles run: 1916

Number of cycles run: 5654

Number of cycles run: 664

Number of cycles run: 2459

Number of cycles run: 1918

Number of cycles run: 2196

Number of cycles run: 470

Number of cycles run: 3764

Number of cycles run: 11812

Number of cycles run: 32608

Number of cycles run: 1184

Number of cycles run: 468

Number of cycles run: 2533

Number of cycles run: 621

Number of cycles run: 50000

Number of cycles run: 2217

Number of cycles run: 50000

Number of cycles run: 1458

Number of cycles run: 1008

Number of cycles run: 1840

Number of cycles run: 1735

Number of cycles run: 2491

Number of cycles run: 875

Number of cycles run: 1380

Number of cycles run: 9330

Number of cycles run: 782

Number of cycles run: 21335

Number of cycles run: 4671

Number of cycles run: 4831

Number of cycles run: 1330

Number of cycles run: 444

Number of cycles run: 1223

Number of cycles run: 3014

Number of cycles run: 1920

Number of cycles run: 4943

Number of cycles run: 12639

Number of cycles run: 2081

Number of cycles run: 1047

Number of cycles run: 1383

Number of cycles run: 1991

Number of cycles run: 2613

Number of cycles run: 2569

Number of cycles run: 4401

Number of cycles run: 1385

Number of cycles run: 11280

Number of cycles run: 988

Av cycles for attraction strength 1.4 is 6479

standard diviation is 10777.2779241