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

[GCC 7.2.0] on linux

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

Testing average cycles for attraction strength 0.6

Number of cycles run: 4717

Number of cycles run: 3654

Number of cycles run: 6563

Number of cycles run: 716

Number of cycles run: 4097

Number of cycles run: 6596

Number of cycles run: 3909

Number of cycles run: 2658

Number of cycles run: 1690

Number of cycles run: 5893

Number of cycles run: 3177

Number of cycles run: 791

Number of cycles run: 31150

Number of cycles run: 3465

Number of cycles run: 2365

Number of cycles run: 4462

Number of cycles run: 2628

Number of cycles run: 2656

Number of cycles run: 5517

Number of cycles run: 4574

Number of cycles run: 18588

Number of cycles run: 2652

Number of cycles run: 8365

Number of cycles run: 50000

Number of cycles run: 1997

Number of cycles run: 8512

Number of cycles run: 1909

Number of cycles run: 12203

Number of cycles run: 3853

Number of cycles run: 3402

Number of cycles run: 2832

Number of cycles run: 2973

Number of cycles run: 1966

Number of cycles run: 1235

Number of cycles run: 8539

Number of cycles run: 13706

Number of cycles run: 4052

Number of cycles run: 2436

Number of cycles run: 3618

Number of cycles run: 2693

Number of cycles run: 3906

Number of cycles run: 465

Number of cycles run: 2973

Number of cycles run: 2098

Number of cycles run: 6528

Number of cycles run: 10620

Number of cycles run: 2965

Number of cycles run: 9436

Number of cycles run: 50000

Number of cycles run: 3318

Number of cycles run: 4398

Number of cycles run: 1391

Number of cycles run: 686

Number of cycles run: 3979

Number of cycles run: 2013

Number of cycles run: 22994

Number of cycles run: 24942

Number of cycles run: 1490

Number of cycles run: 5996

Number of cycles run: 15772

Number of cycles run: 1696

Number of cycles run: 2755

Number of cycles run: 454

Number of cycles run: 6467

Number of cycles run: 779

Number of cycles run: 2818

Number of cycles run: 7670

Number of cycles run: 5793

Number of cycles run: 22279

Number of cycles run: 9927

Number of cycles run: 50000

Number of cycles run: 2927

Number of cycles run: 441

Number of cycles run: 1937

Number of cycles run: 21472

Number of cycles run: 11041

Number of cycles run: 3466

Number of cycles run: 50000

Number of cycles run: 20961

Number of cycles run: 4064

Number of cycles run: 2766

Number of cycles run: 5051

Number of cycles run: 50000

Number of cycles run: 2679

Number of cycles run: 8275

Number of cycles run: 1324

Number of cycles run: 10122

Number of cycles run: 16111

Number of cycles run: 36394

Number of cycles run: 50000

Number of cycles run: 930

Number of cycles run: 2847

Number of cycles run: 454

Number of cycles run: 1119

Number of cycles run: 3870

Number of cycles run: 5527

Number of cycles run: 2868

Number of cycles run: 1579

Number of cycles run: 861

Number of cycles run: 4799

Av cycles for attraction strength 0.6 is 8673

standard diviation is 12405.7594729

Testing average cycles for attraction strength 0.6

Number of cycles run: 4565

Number of cycles run: 1250

Number of cycles run: 2321

Number of cycles run: 795

Number of cycles run: 2731

Number of cycles run: 631

Number of cycles run: 857

Number of cycles run: 2726

Number of cycles run: 2025

Number of cycles run: 455

Number of cycles run: 50000

Number of cycles run: 4069

Number of cycles run: 3373

Number of cycles run: 50000

Number of cycles run: 4567

Number of cycles run: 1593

Number of cycles run: 19224

Number of cycles run: 3157

Number of cycles run: 50000

Number of cycles run: 2766

Number of cycles run: 4121

Number of cycles run: 2455

Number of cycles run: 29676

Number of cycles run: 2774

Number of cycles run: 9143

Number of cycles run: 838

Number of cycles run: 2795

Number of cycles run: 6332

Number of cycles run: 569

Number of cycles run: 1871

Number of cycles run: 2581

Number of cycles run: 12762

Number of cycles run: 2098

Number of cycles run: 2401

Number of cycles run: 6841

Number of cycles run: 3216

Number of cycles run: 12100

Number of cycles run: 2532

Number of cycles run: 2376

Number of cycles run: 50000

Number of cycles run: 2809

Number of cycles run: 2271

Number of cycles run: 3076

Number of cycles run: 6196

Number of cycles run: 8926

Number of cycles run: 50000

Number of cycles run: 3281

Number of cycles run: 13012

Number of cycles run: 5775

Number of cycles run: 2008

Number of cycles run: 50000

Number of cycles run: 1147

Number of cycles run: 50000

Number of cycles run: 2229

Number of cycles run: 5667

Number of cycles run: 1615

Number of cycles run: 8392

Number of cycles run: 4452

Number of cycles run: 4116

Number of cycles run: 2316

Number of cycles run: 10588

Number of cycles run: 1364

Number of cycles run: 4396

Number of cycles run: 39715

Number of cycles run: 7908

Number of cycles run: 1245

Number of cycles run: 658

Number of cycles run: 11189

Number of cycles run: 8834

Number of cycles run: 1890

Number of cycles run: 3317

Number of cycles run: 4271

Number of cycles run: 1745

Number of cycles run: 50000

Number of cycles run: 3697

Number of cycles run: 2412

Number of cycles run: 1400

Number of cycles run: 4139

Number of cycles run: 3685

Number of cycles run: 50000

Number of cycles run: 2752

Number of cycles run: 6859

Number of cycles run: 13546

Number of cycles run: 3969

Number of cycles run: 4230

Number of cycles run: 1938

Number of cycles run: 722

Number of cycles run: 6412

Number of cycles run: 2353

Number of cycles run: 3985

Number of cycles run: 6911

Number of cycles run: 7168

Number of cycles run: 3077

Number of cycles run: 3681

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 1152

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 2073

Av cycles for attraction strength 0.6 is 10751

standard diviation is 16179.1309947

Testing average cycles for attraction strength 0.6

Number of cycles run: 1655

Number of cycles run: 2770

Number of cycles run: 6029

Number of cycles run: 5040

Number of cycles run: 3181

Number of cycles run: 5198

Number of cycles run: 605

Number of cycles run: 959

Number of cycles run: 4284

Number of cycles run: 3322

Number of cycles run: 3455

Number of cycles run: 4919

Number of cycles run: 4172

Number of cycles run: 7370

Number of cycles run: 7217

Number of cycles run: 2707

Number of cycles run: 3801

Number of cycles run: 2453

Number of cycles run: 3127

Number of cycles run: 1875

Number of cycles run: 511

Number of cycles run: 5297

Number of cycles run: 595

Number of cycles run: 1368

Number of cycles run: 6302

Number of cycles run: 1745

Number of cycles run: 5913

Number of cycles run: 14583

Number of cycles run: 4480

Number of cycles run: 4496

Number of cycles run: 3988

Number of cycles run: 1485

Number of cycles run: 50000

Number of cycles run: 9576

Number of cycles run: 2268

Number of cycles run: 50000

Number of cycles run: 3081

Number of cycles run: 455

Number of cycles run: 15490

Number of cycles run: 8676

Number of cycles run: 1232

Number of cycles run: 6543

Number of cycles run: 3073

Number of cycles run: 459

Number of cycles run: 3548

Number of cycles run: 1368

Number of cycles run: 2066

Number of cycles run: 50000

Number of cycles run: 1623

Number of cycles run: 777

Number of cycles run: 2490

Number of cycles run: 1608

Number of cycles run: 3383

Number of cycles run: 3572

Number of cycles run: 3085

Number of cycles run: 7641

Number of cycles run: 1266

Number of cycles run: 1666

Number of cycles run: 2947

Number of cycles run: 50000

Number of cycles run: 3261

Number of cycles run: 2986

Number of cycles run: 1465

Number of cycles run: 2286

Number of cycles run: 6870

Number of cycles run: 558

Number of cycles run: 1205

Number of cycles run: 1036

Number of cycles run: 7449

Number of cycles run: 16265

Number of cycles run: 3542

Number of cycles run: 945

Number of cycles run: 3592

Number of cycles run: 9759

Number of cycles run: 3224

Number of cycles run: 5095

Number of cycles run: 3160

Number of cycles run: 2034

Number of cycles run: 50000

Number of cycles run: 3321

Number of cycles run: 2450

Number of cycles run: 3165

Number of cycles run: 3573

Number of cycles run: 3939

Number of cycles run: 25204

Number of cycles run: 1910

Number of cycles run: 2656

Number of cycles run: 873

Number of cycles run: 1123

Number of cycles run: 8435

Number of cycles run: 4305

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 3124

Number of cycles run: 992

Number of cycles run: 939

Number of cycles run: 567

Number of cycles run: 50000

Number of cycles run: 1081

Number of cycles run: 50000

Av cycles for attraction strength 0.6 is 8051

standard diviation is 13752.4726296

Testing average cycles for attraction strength 0.6

Number of cycles run: 618

Number of cycles run: 3565

Number of cycles run: 1790

Number of cycles run: 1397

Number of cycles run: 2090

Number of cycles run: 9229

Number of cycles run: 3073

Number of cycles run: 1344

Number of cycles run: 2728

Number of cycles run: 50000

Number of cycles run: 23250

Number of cycles run: 1376

Number of cycles run: 2556

Number of cycles run: 50000

Number of cycles run: 10128

Number of cycles run: 3538

Number of cycles run: 2989

Number of cycles run: 1264

Number of cycles run: 3348

Number of cycles run: 7720

Number of cycles run: 5183

Number of cycles run: 3170

Number of cycles run: 446

Number of cycles run: 3724

Number of cycles run: 8797

Number of cycles run: 1581

Number of cycles run: 2634

Number of cycles run: 1121

Number of cycles run: 3019

Number of cycles run: 5507

Number of cycles run: 2093

Number of cycles run: 6075

Number of cycles run: 2896

Number of cycles run: 2770

Number of cycles run: 1441

Number of cycles run: 2309

Number of cycles run: 3628

Number of cycles run: 22897

Number of cycles run: 2420

Number of cycles run: 1423

Number of cycles run: 7520

Number of cycles run: 50000

Number of cycles run: 2409

Number of cycles run: 612

Number of cycles run: 9499

Number of cycles run: 4904

Number of cycles run: 460

Number of cycles run: 1835

Number of cycles run: 5695

Number of cycles run: 364

Number of cycles run: 50000

Number of cycles run: 8355

Number of cycles run: 2227

Number of cycles run: 2427

Number of cycles run: 2038

Number of cycles run: 447

Number of cycles run: 416

Number of cycles run: 3957

Number of cycles run: 50000

Number of cycles run: 15090

Number of cycles run: 2405

Number of cycles run: 1958

Number of cycles run: 1015

Number of cycles run: 2498

Number of cycles run: 4040

Number of cycles run: 3282

Number of cycles run: 3018

Number of cycles run: 4019

Number of cycles run: 3529

Number of cycles run: 1165

Number of cycles run: 2132

Number of cycles run: 2727

Number of cycles run: 4512

Number of cycles run: 1352

Number of cycles run: 2046

Number of cycles run: 50000

Number of cycles run: 38041

Number of cycles run: 6733

Number of cycles run: 689

Number of cycles run: 692

Number of cycles run: 5447

Number of cycles run: 1295

Number of cycles run: 4238

Number of cycles run: 21523

Number of cycles run: 2780

Number of cycles run: 2711

Number of cycles run: 4791

Number of cycles run: 2866

Number of cycles run: 2481

Number of cycles run: 2885

Number of cycles run: 1482

Number of cycles run: 50000

Number of cycles run: 462

Number of cycles run: 1964

Number of cycles run: 3833

Number of cycles run: 7364

Number of cycles run: 50000

Number of cycles run: 1817

Number of cycles run: 4082

Number of cycles run: 1323

Av cycles for attraction strength 0.6 is 7925

standard diviation is 13560.6338116

Testing average cycles for attraction strength 0.6

Number of cycles run: 3790

Number of cycles run: 1368

Number of cycles run: 5119

Number of cycles run: 37635

Number of cycles run: 18559

Number of cycles run: 2868

Number of cycles run: 1934

Number of cycles run: 8071

Number of cycles run: 5303

Number of cycles run: 50000

Number of cycles run: 3371

Number of cycles run: 1740

Number of cycles run: 6975

Number of cycles run: 1395

Number of cycles run: 442

Number of cycles run: 3354

Number of cycles run: 466

Number of cycles run: 4957

Number of cycles run: 50000

Number of cycles run: 2539

Number of cycles run: 3431

Number of cycles run: 1445

Number of cycles run: 11319

Number of cycles run: 4230

Number of cycles run: 2095

Number of cycles run: 455

Number of cycles run: 747

Number of cycles run: 3721

Number of cycles run: 4711

Number of cycles run: 2615

Number of cycles run: 4634

Number of cycles run: 4809

Number of cycles run: 4423

Number of cycles run: 496

Number of cycles run: 837

Number of cycles run: 2889

Number of cycles run: 50000

Number of cycles run: 11356

Number of cycles run: 7970

Number of cycles run: 1675

Number of cycles run: 1610

Number of cycles run: 22509

Number of cycles run: 6042

Number of cycles run: 1224

Number of cycles run: 1748

Number of cycles run: 2191

Number of cycles run: 939

Number of cycles run: 2439

Number of cycles run: 4906

Number of cycles run: 7967

Number of cycles run: 50000

Number of cycles run: 1108

Number of cycles run: 7266

Number of cycles run: 50000

Number of cycles run: 1014

Number of cycles run: 24944

Number of cycles run: 1365

Number of cycles run: 1842

Number of cycles run: 2653

Number of cycles run: 50000

Number of cycles run: 1419

Number of cycles run: 1384

Number of cycles run: 5351

Number of cycles run: 11274

Number of cycles run: 4303

Number of cycles run: 5236

Number of cycles run: 5038

Number of cycles run: 50000

Number of cycles run: 2650

Number of cycles run: 3886

Number of cycles run: 11933

Number of cycles run: 1224

Number of cycles run: 50000

Number of cycles run: 6914

Number of cycles run: 546

Number of cycles run: 16898

Number of cycles run: 750

Number of cycles run: 50000

Number of cycles run: 5973

Number of cycles run: 824

Number of cycles run: 12710

Number of cycles run: 6719

Number of cycles run: 3444

Number of cycles run: 8552

Number of cycles run: 440

Number of cycles run: 626

Number of cycles run: 50000

Number of cycles run: 16131

Number of cycles run: 3507

Number of cycles run: 1832

Number of cycles run: 50000

Number of cycles run: 2943

Number of cycles run: 1241

Number of cycles run: 4756

Number of cycles run: 5485

Number of cycles run: 18904

Number of cycles run: 952

Number of cycles run: 2964

Number of cycles run: 13068

Number of cycles run: 22933

Av cycles for attraction strength 0.6 is 10383

standard diviation is 15246.4878991

Testing average cycles for attraction strength 0.6

Number of cycles run: 3103

Number of cycles run: 2457

Number of cycles run: 590

Number of cycles run: 8650

Number of cycles run: 4419

Number of cycles run: 3581

Number of cycles run: 12204

Number of cycles run: 50000

Number of cycles run: 5559

Number of cycles run: 5377

Number of cycles run: 8359

Number of cycles run: 11903

Number of cycles run: 7589

Number of cycles run: 4957

Number of cycles run: 3919

Number of cycles run: 2364

Number of cycles run: 21997

Number of cycles run: 5757

Number of cycles run: 3121

Number of cycles run: 2648

Number of cycles run: 1831

Number of cycles run: 4728

Number of cycles run: 409

Number of cycles run: 4784

Number of cycles run: 3569

Number of cycles run: 568

Number of cycles run: 819

Number of cycles run: 4958

Number of cycles run: 4323

Number of cycles run: 3697

Number of cycles run: 6401

Number of cycles run: 50000

Number of cycles run: 9895

Number of cycles run: 14904

Number of cycles run: 3196

Number of cycles run: 2308

Number of cycles run: 3738

Number of cycles run: 7558

Number of cycles run: 1178

Number of cycles run: 6030

Number of cycles run: 6759

Number of cycles run: 8026

Number of cycles run: 924

Number of cycles run: 2901

Number of cycles run: 400

Number of cycles run: 2446

Number of cycles run: 1679

Number of cycles run: 5829

Number of cycles run: 3723

Number of cycles run: 8431

Number of cycles run: 15013

Number of cycles run: 2462

Number of cycles run: 2132

Number of cycles run: 50000

Number of cycles run: 442

Number of cycles run: 1522

Number of cycles run: 586

Number of cycles run: 50000

Number of cycles run: 5412

Number of cycles run: 14589

Number of cycles run: 37289

Number of cycles run: 3751

Number of cycles run: 4969

Number of cycles run: 464

Number of cycles run: 2359

Number of cycles run: 22282

Number of cycles run: 2019

Number of cycles run: 2655

Number of cycles run: 2978

Number of cycles run: 6648

Number of cycles run: 16208

Number of cycles run: 13392

Number of cycles run: 3168

Number of cycles run: 2499

Number of cycles run: 6567

Number of cycles run: 3657

Number of cycles run: 3111

Number of cycles run: 6219

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 2631

Number of cycles run: 8645

Number of cycles run: 7247

Number of cycles run: 50000

Number of cycles run: 6007

Number of cycles run: 4091

Number of cycles run: 5156

Number of cycles run: 868

Number of cycles run: 4004

Number of cycles run: 1655

Number of cycles run: 2811

Number of cycles run: 1559

Number of cycles run: 4275

Number of cycles run: 2439

Number of cycles run: 50000

Number of cycles run: 14873

Number of cycles run: 9963

Number of cycles run: 2749

Number of cycles run: 50000

Number of cycles run: 3480

Av cycles for attraction strength 0.6 is 9594

standard diviation is 13844.5124543