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\_S3.py =====

Testing average cycles for attraction strength 0.6

Number of cycles run: 3420

Number of cycles run: 1366

Number of cycles run: 570

Number of cycles run: 1638

Number of cycles run: 1495

Number of cycles run: 43725

Number of cycles run: 2540

Number of cycles run: 17375

Number of cycles run: 15994

Number of cycles run: 3253

Number of cycles run: 5079

Number of cycles run: 13213

Number of cycles run: 2393

Number of cycles run: 1811

Number of cycles run: 2362

Number of cycles run: 829

Number of cycles run: 3830

Number of cycles run: 3089

Number of cycles run: 1377

Number of cycles run: 8644

Number of cycles run: 3558

Number of cycles run: 3057

Number of cycles run: 5192

Number of cycles run: 760

Number of cycles run: 1278

Number of cycles run: 37243

Number of cycles run: 50000

Number of cycles run: 8479

Number of cycles run: 1940

Number of cycles run: 50000

Number of cycles run: 3161

Number of cycles run: 4335

Number of cycles run: 2321

Number of cycles run: 4434

Number of cycles run: 3992

Number of cycles run: 6787

Number of cycles run: 702

Number of cycles run: 4344

Number of cycles run: 771

Number of cycles run: 50000

Number of cycles run: 2763

Number of cycles run: 1252

Number of cycles run: 3088

Number of cycles run: 50000

Number of cycles run: 2137

Number of cycles run: 7276

Number of cycles run: 1137

Number of cycles run: 4857

Number of cycles run: 461

Number of cycles run: 50000

Number of cycles run: 9361

Number of cycles run: 18170

Number of cycles run: 6780

Number of cycles run: 2071

Number of cycles run: 467

Number of cycles run: 715

Number of cycles run: 2571

Number of cycles run: 8793

Number of cycles run: 3234

Number of cycles run: 2648

Number of cycles run: 2589

Number of cycles run: 3020

Number of cycles run: 3155

Number of cycles run: 877

Number of cycles run: 4010

Number of cycles run: 4019

Number of cycles run: 1386

Number of cycles run: 7643

Number of cycles run: 5092

Number of cycles run: 3284

Number of cycles run: 50000

Number of cycles run: 1910

Number of cycles run: 18200

Number of cycles run: 3463

Number of cycles run: 2022

Number of cycles run: 1660

Number of cycles run: 1835

Number of cycles run: 6095

Number of cycles run: 1930

Number of cycles run: 1302

Number of cycles run: 48282

Number of cycles run: 1109

Number of cycles run: 3591

Number of cycles run: 2251

Number of cycles run: 3940

Number of cycles run: 3341

Number of cycles run: 430

Number of cycles run: 1460

Number of cycles run: 3471

Number of cycles run: 5380

Number of cycles run: 3885

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 454

Number of cycles run: 1512

Number of cycles run: 2020

Number of cycles run: 30385

Number of cycles run: 2749

Number of cycles run: 11847

Number of cycles run: 458

Av cycles for attraction strength 0.6 is 9041

standard diviation is 14576.9382088

Testing average cycles for attraction strength 0.6

Number of cycles run: 4093

Number of cycles run: 7228

Number of cycles run: 858

Number of cycles run: 5169

Number of cycles run: 2623

Number of cycles run: 50000

Number of cycles run: 2207

Number of cycles run: 3435

Number of cycles run: 638

Number of cycles run: 30649

Number of cycles run: 485

Number of cycles run: 50000

Number of cycles run: 16442

Number of cycles run: 2571

Number of cycles run: 748

Number of cycles run: 50000

Number of cycles run: 5838

Number of cycles run: 7336

Number of cycles run: 3443

Number of cycles run: 869

Number of cycles run: 50000

Number of cycles run: 1564

Number of cycles run: 3604

Number of cycles run: 2583

Number of cycles run: 3657

Number of cycles run: 459

Number of cycles run: 7736

Number of cycles run: 9036

Number of cycles run: 4712

Number of cycles run: 4414

Number of cycles run: 7661

Number of cycles run: 19716

Number of cycles run: 3934

Number of cycles run: 3833

Number of cycles run: 3942

Number of cycles run: 1216

Number of cycles run: 2788

Number of cycles run: 5618

Number of cycles run: 2451

Number of cycles run: 2672

Number of cycles run: 3790

Number of cycles run: 50000

Number of cycles run: 7011

Number of cycles run: 5716

Number of cycles run: 5234

Number of cycles run: 1263

Number of cycles run: 1178

Number of cycles run: 800

Number of cycles run: 1079

Number of cycles run: 3553

Number of cycles run: 5646

Number of cycles run: 1447

Number of cycles run: 2963

Number of cycles run: 8705

Number of cycles run: 2581

Number of cycles run: 1830

Number of cycles run: 3138

Number of cycles run: 4437

Number of cycles run: 4108

Number of cycles run: 2766

Number of cycles run: 49237

Number of cycles run: 3056

Number of cycles run: 8240

Number of cycles run: 3257

Number of cycles run: 50000

Number of cycles run: 2209

Number of cycles run: 1468

Number of cycles run: 4085

Number of cycles run: 4477

Number of cycles run: 50000

Number of cycles run: 944

Number of cycles run: 10688

Number of cycles run: 3442

Number of cycles run: 11938

Number of cycles run: 4728

Number of cycles run: 3554

Number of cycles run: 1565

Number of cycles run: 1007

Number of cycles run: 6886

Number of cycles run: 8146

Number of cycles run: 50000

Number of cycles run: 2253

Number of cycles run: 2294

Number of cycles run: 7156

Number of cycles run: 508

Number of cycles run: 5053

Number of cycles run: 1417

Number of cycles run: 1692

Number of cycles run: 2080

Number of cycles run: 4010

Number of cycles run: 1674

Number of cycles run: 1452

Number of cycles run: 31037

Number of cycles run: 50000

Number of cycles run: 825

Number of cycles run: 3755

Number of cycles run: 1455

Number of cycles run: 4869

Number of cycles run: 2726

Number of cycles run: 4838

Av cycles for attraction strength 0.6 is 9114

standard diviation is 14512.0020254

Testing average cycles for attraction strength 0.6

Number of cycles run: 2082

Number of cycles run: 609

Number of cycles run: 2723

Number of cycles run: 1385

Number of cycles run: 501

Number of cycles run: 697

Number of cycles run: 821

Number of cycles run: 3996

Number of cycles run: 1838

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 477

Number of cycles run: 3138

Number of cycles run: 1406

Number of cycles run: 565

Number of cycles run: 3389

Number of cycles run: 6093

Number of cycles run: 602

Number of cycles run: 3675

Number of cycles run: 23544

Number of cycles run: 1814

Number of cycles run: 1781

Number of cycles run: 2691

Number of cycles run: 3111

Number of cycles run: 4096

Number of cycles run: 5093

Number of cycles run: 50000

Number of cycles run: 11698

Number of cycles run: 2392

Number of cycles run: 4747

Number of cycles run: 4201

Number of cycles run: 50000

Number of cycles run: 1063

Number of cycles run: 2450

Number of cycles run: 1686

Number of cycles run: 6267

Number of cycles run: 25832

Number of cycles run: 1880

Number of cycles run: 2193

Number of cycles run: 7479

Number of cycles run: 3005

Number of cycles run: 460

Number of cycles run: 2197

Number of cycles run: 5353

Number of cycles run: 50000

Number of cycles run: 1680

Number of cycles run: 11251

Number of cycles run: 2645

Number of cycles run: 1209

Number of cycles run: 6743

Number of cycles run: 2697

Number of cycles run: 50000

Number of cycles run: 7292

Number of cycles run: 3397

Number of cycles run: 14832

Number of cycles run: 1172

Number of cycles run: 6652

Number of cycles run: 50000

Number of cycles run: 12163

Number of cycles run: 4822

Number of cycles run: 3236

Number of cycles run: 638

Number of cycles run: 2132

Number of cycles run: 588

Number of cycles run: 2815

Number of cycles run: 6843

Number of cycles run: 1164

Number of cycles run: 951

Number of cycles run: 1616

Number of cycles run: 3422

Number of cycles run: 1563

Number of cycles run: 1474

Number of cycles run: 635

Number of cycles run: 5566

Number of cycles run: 11373

Number of cycles run: 5252

Number of cycles run: 13096

Number of cycles run: 1314

Number of cycles run: 1715

Number of cycles run: 497

Number of cycles run: 5866

Number of cycles run: 504

Number of cycles run: 2641

Number of cycles run: 2864

Number of cycles run: 26010

Number of cycles run: 4013

Number of cycles run: 2074

Number of cycles run: 3459

Number of cycles run: 5629

Number of cycles run: 6673

Number of cycles run: 10334

Number of cycles run: 2156

Number of cycles run: 2333

Number of cycles run: 2727

Number of cycles run: 11878

Number of cycles run: 6025

Number of cycles run: 722

Number of cycles run: 1895

Number of cycles run: 24401

Number of cycles run: 666

Av cycles for attraction strength 0.6 is 7743

standard diviation is 12762.5719435

Testing average cycles for attraction strength 0.6

Number of cycles run: 3927

Number of cycles run: 3762

Number of cycles run: 20597

Number of cycles run: 2482

Number of cycles run: 3652

Number of cycles run: 432

Number of cycles run: 1977

Number of cycles run: 4174

Number of cycles run: 822

Number of cycles run: 28626

Number of cycles run: 4325

Number of cycles run: 15281

Number of cycles run: 3655

Number of cycles run: 4068

Number of cycles run: 2583

Number of cycles run: 501

Number of cycles run: 2167

Number of cycles run: 2137

Number of cycles run: 50000

Number of cycles run: 1776

Number of cycles run: 2087

Number of cycles run: 7002

Number of cycles run: 5431

Number of cycles run: 3470

Number of cycles run: 1608

Number of cycles run: 1059

Number of cycles run: 1674

Number of cycles run: 30095

Number of cycles run: 530

Number of cycles run: 4442

Number of cycles run: 1469

Number of cycles run: 50000

Number of cycles run: 5476

Number of cycles run: 7359

Number of cycles run: 1746

Number of cycles run: 963

Number of cycles run: 3980

Number of cycles run: 5117

Number of cycles run: 10214

Number of cycles run: 2373

Number of cycles run: 1878

Number of cycles run: 1203

Number of cycles run: 5256

Number of cycles run: 5463

Number of cycles run: 3908

Number of cycles run: 723

Number of cycles run: 48157

Number of cycles run: 9515

Number of cycles run: 1603

Number of cycles run: 1942

Number of cycles run: 618

Number of cycles run: 4088

Number of cycles run: 6055

Number of cycles run: 7111

Number of cycles run: 29573

Number of cycles run: 1395

Number of cycles run: 1172

Number of cycles run: 1460

Number of cycles run: 14693

Number of cycles run: 41134

Number of cycles run: 5587

Number of cycles run: 4652

Number of cycles run: 3145

Number of cycles run: 23725

Number of cycles run: 18889

Number of cycles run: 2955

Number of cycles run: 2615

Number of cycles run: 22977

Number of cycles run: 4000

Number of cycles run: 3020

Number of cycles run: 1932

Number of cycles run: 1175

Number of cycles run: 2110

Number of cycles run: 3008

Number of cycles run: 1840

Number of cycles run: 4303

Number of cycles run: 2794

Number of cycles run: 10250

Number of cycles run: 3149

Number of cycles run: 12078

Number of cycles run: 712

Number of cycles run: 3153

Number of cycles run: 2139

Number of cycles run: 3723

Number of cycles run: 8056

Number of cycles run: 29661

Number of cycles run: 760

Number of cycles run: 1983

Number of cycles run: 5315

Number of cycles run: 3064

Number of cycles run: 2927

Number of cycles run: 50000

Number of cycles run: 4945

Number of cycles run: 7276

Number of cycles run: 11201

Number of cycles run: 10183

Number of cycles run: 2682

Number of cycles run: 9807

Number of cycles run: 50000

Number of cycles run: 2642

Av cycles for attraction strength 0.6 is 8344

standard diviation is 12148.5363592

Testing average cycles for attraction strength 0.6

Number of cycles run: 2971

Number of cycles run: 2873

Number of cycles run: 14241

Number of cycles run: 3330

Number of cycles run: 872

Number of cycles run: 1726

Number of cycles run: 7176

Number of cycles run: 2706

Number of cycles run: 1936

Number of cycles run: 2657

Number of cycles run: 2246

Number of cycles run: 3891

Number of cycles run: 2578

Number of cycles run: 3896

Number of cycles run: 520

Number of cycles run: 3998

Number of cycles run: 50000

Number of cycles run: 2104

Number of cycles run: 584

Number of cycles run: 8944

Number of cycles run: 4027

Number of cycles run: 1913

Number of cycles run: 6359

Number of cycles run: 50000

Number of cycles run: 4663

Number of cycles run: 1859

Number of cycles run: 3598

Number of cycles run: 3900

Number of cycles run: 2991

Number of cycles run: 2442

Number of cycles run: 2928

Number of cycles run: 4353

Number of cycles run: 11528

Number of cycles run: 1365

Number of cycles run: 750

Number of cycles run: 2372

Number of cycles run: 558

Number of cycles run: 2568

Number of cycles run: 718

Number of cycles run: 1021

Number of cycles run: 6291

Number of cycles run: 50000

Number of cycles run: 11958

Number of cycles run: 9881

Number of cycles run: 3073

Number of cycles run: 2131

Number of cycles run: 5313

Number of cycles run: 3715

Number of cycles run: 3957

Number of cycles run: 5171

Number of cycles run: 50000

Number of cycles run: 2626

Number of cycles run: 50000

Number of cycles run: 2536

Number of cycles run: 3482

Number of cycles run: 50000

Number of cycles run: 1380

Number of cycles run: 1885

Number of cycles run: 2475

Number of cycles run: 595

Number of cycles run: 50000

Number of cycles run: 1863

Number of cycles run: 46115

Number of cycles run: 9976

Number of cycles run: 2731

Number of cycles run: 3437

Number of cycles run: 2466

Number of cycles run: 4951

Number of cycles run: 8934

Number of cycles run: 50000

Number of cycles run: 9677

Number of cycles run: 1918

Number of cycles run: 3051

Number of cycles run: 468

Number of cycles run: 466

Number of cycles run: 30920

Number of cycles run: 4372

Number of cycles run: 6358

Number of cycles run: 11760

Number of cycles run: 1492

Number of cycles run: 4426

Number of cycles run: 5607

Number of cycles run: 1501

Number of cycles run: 2913

Number of cycles run: 8924

Number of cycles run: 430

Number of cycles run: 3942

Number of cycles run: 709

Number of cycles run: 1289

Number of cycles run: 3052

Number of cycles run: 1231

Number of cycles run: 4454

Number of cycles run: 3732

Number of cycles run: 4222

Number of cycles run: 1363

Number of cycles run: 3221

Number of cycles run: 9687

Number of cycles run: 10394

Number of cycles run: 1500

Number of cycles run: 50000

Av cycles for attraction strength 0.6 is 8691

standard diviation is 14275.2887321

Testing average cycles for attraction strength 0.6

Number of cycles run: 5609

Number of cycles run: 50000

Number of cycles run: 7692

Number of cycles run: 4285

Number of cycles run: 1620

Number of cycles run: 1972

Number of cycles run: 5118

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 4462

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 1370

Number of cycles run: 9914

Number of cycles run: 3616

Number of cycles run: 50000

Number of cycles run: 1648

Number of cycles run: 2160

Number of cycles run: 4419

Number of cycles run: 6630

Number of cycles run: 774

Number of cycles run: 2760

Number of cycles run: 2327

Number of cycles run: 21292

Number of cycles run: 4502

Number of cycles run: 9498

Number of cycles run: 3484

Number of cycles run: 2423

Number of cycles run: 3841

Number of cycles run: 2695

Number of cycles run: 50000

Number of cycles run: 4368

Number of cycles run: 4778

Number of cycles run: 4249

Number of cycles run: 20924

Number of cycles run: 10036

Number of cycles run: 5268

Number of cycles run: 1107

Number of cycles run: 5574

Number of cycles run: 439

Number of cycles run: 1451

Number of cycles run: 31199

Number of cycles run: 15385

Number of cycles run: 2591

Number of cycles run: 50000

Number of cycles run: 4462

Number of cycles run: 3152

Number of cycles run: 3236

Number of cycles run: 1292

Number of cycles run: 2767

Number of cycles run: 3482

Number of cycles run: 16329

Number of cycles run: 50000

Number of cycles run: 4826

Number of cycles run: 3958

Number of cycles run: 2871

Number of cycles run: 7968

Number of cycles run: 4417

Number of cycles run: 4412

Number of cycles run: 5073

Number of cycles run: 17315

Number of cycles run: 1942

Number of cycles run: 1116

Number of cycles run: 1921

Number of cycles run: 39483

Number of cycles run: 50000

Number of cycles run: 2235

Number of cycles run: 6201

Number of cycles run: 7334

Number of cycles run: 6754

Number of cycles run: 3535

Number of cycles run: 5116

Number of cycles run: 2979

Number of cycles run: 1127

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 8876

Number of cycles run: 9750

Number of cycles run: 2865

Number of cycles run: 5441

Number of cycles run: 2564

Number of cycles run: 793

Number of cycles run: 2604

Number of cycles run: 50000

Number of cycles run: 3139

Number of cycles run: 3889

Number of cycles run: 5437

Number of cycles run: 4225

Number of cycles run: 1285

Number of cycles run: 4377

Number of cycles run: 539

Number of cycles run: 8974

Number of cycles run: 7572

Number of cycles run: 657

Number of cycles run: 17155

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 3073

Number of cycles run: 1969

Av cycles for attraction strength 0.6 is 12819

standard diviation is 17330.5275428

Testing average cycles for attraction strength 0.6

Number of cycles run: 8913

Number of cycles run: 2755

Number of cycles run: 2331

Number of cycles run: 25148

Number of cycles run: 3443

Number of cycles run: 4443

Number of cycles run: 4090

Number of cycles run: 7605

Number of cycles run: 1031

Number of cycles run: 3488

Number of cycles run: 11666

Number of cycles run: 7516

Number of cycles run: 2836

Number of cycles run: 8018

Number of cycles run: 50000

Number of cycles run: 3237

Number of cycles run: 1918

Number of cycles run: 462

Number of cycles run: 5220

Number of cycles run: 2220

Number of cycles run: 1337

Number of cycles run: 1681

Number of cycles run: 2809

Number of cycles run: 9328

Number of cycles run: 50000

Number of cycles run: 4639

Number of cycles run: 4481

Number of cycles run: 11753

Number of cycles run: 660

Number of cycles run: 430

Number of cycles run: 4087

Number of cycles run: 50000

Number of cycles run: 5595

Number of cycles run: 5720

Number of cycles run: 23616

Number of cycles run: 50000

Number of cycles run: 5532

Number of cycles run: 798

Number of cycles run: 2004

Number of cycles run: 4353

Number of cycles run: 4758

Number of cycles run: 2123

Number of cycles run: 2850

Number of cycles run: 3574

Number of cycles run: 9079

Number of cycles run: 4466

Number of cycles run: 3939

Number of cycles run: 3684

Number of cycles run: 2407

Number of cycles run: 5714

Number of cycles run: 4693

Number of cycles run: 6137

Number of cycles run: 636

Number of cycles run: 1110

Number of cycles run: 50000

Number of cycles run: 11750

Number of cycles run: 17114

Number of cycles run: 805

Number of cycles run: 693

Number of cycles run: 8072

Number of cycles run: 50000

Number of cycles run: 12176

Number of cycles run: 7157

Number of cycles run: 3841

Number of cycles run: 3250

Number of cycles run: 4575

Number of cycles run: 3215

Number of cycles run: 867

Number of cycles run: 660

Number of cycles run: 3719

Number of cycles run: 4600

Number of cycles run: 2015

Number of cycles run: 50000

Number of cycles run: 919

Number of cycles run: 476

Number of cycles run: 5498

Number of cycles run: 4693

Number of cycles run: 591

Number of cycles run: 9472

Number of cycles run: 2275

Number of cycles run: 2050

Number of cycles run: 5353

Number of cycles run: 1084

Number of cycles run: 12189

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 1325

Number of cycles run: 2786

Number of cycles run: 4027

Number of cycles run: 1951

Number of cycles run: 1411

Number of cycles run: 4421

Number of cycles run: 3944

Number of cycles run: 3472

Number of cycles run: 5025

Number of cycles run: 3455

Number of cycles run: 2257

Number of cycles run: 2504

Number of cycles run: 3895

Number of cycles run: 2828

Av cycles for attraction strength 0.6 is 8727

standard diviation is 13694.2933313