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

[GCC 7.2.0] on linux

Type "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: /home/cserv1\_a/soc\_msc/ml16m6y/Downloads/schooling\_R3.py =====

Testing average cycles for repulsion strength 2

Number of cycles run: 3189

Number of cycles run: 3717

Number of cycles run: 962

Number of cycles run: 2284

Number of cycles run: 12384

Number of cycles run: 50000

Number of cycles run: 8409

Number of cycles run: 444

Number of cycles run: 456

Number of cycles run: 7914

Number of cycles run: 6363

Number of cycles run: 5809

Number of cycles run: 1655

Number of cycles run: 1583

Number of cycles run: 11031

Number of cycles run: 425

Number of cycles run: 21810

Number of cycles run: 1915

Number of cycles run: 7019

Number of cycles run: 1427

Number of cycles run: 10831

Number of cycles run: 768

Number of cycles run: 2936

Number of cycles run: 26259

Number of cycles run: 1654

Number of cycles run: 1084

Number of cycles run: 3571

Number of cycles run: 1459

Number of cycles run: 4079

Number of cycles run: 1691

Number of cycles run: 50000

Number of cycles run: 1037

Number of cycles run: 3629

Number of cycles run: 746

Number of cycles run: 1930

Number of cycles run: 2956

Number of cycles run: 47896

Number of cycles run: 3202

Number of cycles run: 1872

Number of cycles run: 6078

Number of cycles run: 2089

Number of cycles run: 1265

Number of cycles run: 473

Number of cycles run: 1483

Number of cycles run: 1247

Number of cycles run: 3333

Number of cycles run: 1242

Number of cycles run: 1606

Number of cycles run: 50000

Number of cycles run: 464

Number of cycles run: 24265

Number of cycles run: 663

Number of cycles run: 585

Number of cycles run: 1741

Number of cycles run: 2242

Number of cycles run: 31632

Number of cycles run: 1910

Number of cycles run: 2962

Number of cycles run: 33518

Number of cycles run: 9786

Number of cycles run: 50000

Number of cycles run: 23798

Number of cycles run: 6380

Number of cycles run: 4355

Number of cycles run: 1792

Number of cycles run: 50000

Number of cycles run: 3016

Number of cycles run: 50000

Number of cycles run: 18992

Number of cycles run: 2332

Number of cycles run: 1264

Number of cycles run: 50000

Number of cycles run: 21816

Number of cycles run: 2606

Number of cycles run: 5193

Number of cycles run: 37499

Number of cycles run: 3176

Number of cycles run: 2075

Number of cycles run: 5969

Number of cycles run: 767

Number of cycles run: 1029

Number of cycles run: 1965

Number of cycles run: 12347

Number of cycles run: 1518

Number of cycles run: 5349

Number of cycles run: 1991

Number of cycles run: 2560

Number of cycles run: 6056

Number of cycles run: 7211

Number of cycles run: 638

Number of cycles run: 2183

Number of cycles run: 10060

Number of cycles run: 3216

Number of cycles run: 2460

Number of cycles run: 2560

Number of cycles run: 2628

Number of cycles run: 1788

Number of cycles run: 9003

Number of cycles run: 50000

Number of cycles run: 25157

Av cycles for repulsion strength 2 is 9857

standard diviation is 14746.1884281

Testing average cycles for repulsion strength 2

Number of cycles run: 31397

Number of cycles run: 6395

Number of cycles run: 1673

Number of cycles run: 2107

Number of cycles run: 2254

Number of cycles run: 577

Number of cycles run: 1923

Number of cycles run: 4948

Number of cycles run: 50000

Number of cycles run: 864

Number of cycles run: 4578

Number of cycles run: 4578

Number of cycles run: 623

Number of cycles run: 6475

Number of cycles run: 3435

Number of cycles run: 1075

Number of cycles run: 7925

Number of cycles run: 2602

Number of cycles run: 3849

Number of cycles run: 7610

Number of cycles run: 50000

Number of cycles run: 2976

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 897

Number of cycles run: 3499

Number of cycles run: 1116

Number of cycles run: 1823

Number of cycles run: 3273

Number of cycles run: 555

Number of cycles run: 1724

Number of cycles run: 2193

Number of cycles run: 1843

Number of cycles run: 1642

Number of cycles run: 509

Number of cycles run: 6348

Number of cycles run: 2019

Number of cycles run: 2096

Number of cycles run: 690

Number of cycles run: 3158

Number of cycles run: 2833

Number of cycles run: 3840

Number of cycles run: 1848

Number of cycles run: 4927

Number of cycles run: 1272

Number of cycles run: 2441

Number of cycles run: 50000

Number of cycles run: 20898

Number of cycles run: 4063

Number of cycles run: 450

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 10757

Number of cycles run: 50000

Number of cycles run: 2054

Number of cycles run: 32035

Number of cycles run: 731

Number of cycles run: 2746

Number of cycles run: 6488

Number of cycles run: 3325

Number of cycles run: 7096

Number of cycles run: 4022

Number of cycles run: 1818

Number of cycles run: 7244

Number of cycles run: 2784

Number of cycles run: 3352

Number of cycles run: 6232

Number of cycles run: 1254

Number of cycles run: 908

Number of cycles run: 3190

Number of cycles run: 2947

Number of cycles run: 1834

Number of cycles run: 2577

Number of cycles run: 50000

Number of cycles run: 2605

Number of cycles run: 1613

Number of cycles run: 2796

Number of cycles run: 4722

Number of cycles run: 14911

Number of cycles run: 2390

Number of cycles run: 50000

Number of cycles run: 2473

Number of cycles run: 688

Number of cycles run: 50000

Number of cycles run: 2648

Number of cycles run: 4816

Number of cycles run: 21624

Number of cycles run: 1038

Number of cycles run: 8398

Number of cycles run: 2942

Number of cycles run: 50000

Number of cycles run: 21531

Number of cycles run: 2162

Number of cycles run: 14082

Number of cycles run: 3576

Number of cycles run: 1711

Number of cycles run: 3125

Number of cycles run: 7361

Number of cycles run: 706

Number of cycles run: 5012

Av cycles for repulsion strength 2 is 10101

standard diviation is 15817.4455435

Testing average cycles for repulsion strength 2

Number of cycles run: 454

Number of cycles run: 3484

Number of cycles run: 3297

Number of cycles run: 50000

Number of cycles run: 6672

Number of cycles run: 618

Number of cycles run: 2478

Number of cycles run: 50000

Number of cycles run: 4155

Number of cycles run: 1230

Number of cycles run: 7163

Number of cycles run: 4004

Number of cycles run: 948

Number of cycles run: 1551

Number of cycles run: 4351

Number of cycles run: 1243

Number of cycles run: 50000

Number of cycles run: 758

Number of cycles run: 2571

Number of cycles run: 22947

Number of cycles run: 850

Number of cycles run: 7019

Number of cycles run: 842

Number of cycles run: 794

Number of cycles run: 1850

Number of cycles run: 1797

Number of cycles run: 2143

Number of cycles run: 2162

Number of cycles run: 1019

Number of cycles run: 4551

Number of cycles run: 898

Number of cycles run: 1135

Number of cycles run: 5751

Number of cycles run: 50000

Number of cycles run: 6923

Number of cycles run: 2739

Number of cycles run: 1778

Number of cycles run: 50000

Number of cycles run: 23927

Number of cycles run: 1656

Number of cycles run: 1220

Number of cycles run: 5315

Number of cycles run: 9583

Number of cycles run: 869

Number of cycles run: 413

Number of cycles run: 4484

Number of cycles run: 2473

Number of cycles run: 17100

Number of cycles run: 1856

Number of cycles run: 15866

Number of cycles run: 10655

Number of cycles run: 50000

Number of cycles run: 34404

Number of cycles run: 4215

Number of cycles run: 3243

Number of cycles run: 3189

Number of cycles run: 4637

Number of cycles run: 652

Number of cycles run: 11748

Number of cycles run: 3855

Number of cycles run: 4287

Number of cycles run: 906

Number of cycles run: 4190

Number of cycles run: 22390

Number of cycles run: 3874

Number of cycles run: 929

Number of cycles run: 2292

Number of cycles run: 50000

Number of cycles run: 36782

Number of cycles run: 424

Number of cycles run: 2636

Number of cycles run: 2415

Number of cycles run: 25016

Number of cycles run: 1187

Number of cycles run: 1244

Number of cycles run: 4404

Number of cycles run: 933

Number of cycles run: 50000

Number of cycles run: 1531

Number of cycles run: 16418

Number of cycles run: 3606

Number of cycles run: 2544

Number of cycles run: 668

Number of cycles run: 1672

Number of cycles run: 18618

Number of cycles run: 2026

Number of cycles run: 9095

Number of cycles run: 7637

Number of cycles run: 5544

Number of cycles run: 50000

Number of cycles run: 7860

Number of cycles run: 2099

Number of cycles run: 1617

Number of cycles run: 2829

Number of cycles run: 611

Number of cycles run: 5448

Number of cycles run: 3830

Number of cycles run: 2730

Number of cycles run: 3792

Number of cycles run: 2778

Av cycles for repulsion strength 2 is 9383

standard diviation is 14536.2751891

Testing average cycles for repulsion strength 2

Number of cycles run: 3682

Number of cycles run: 5561

Number of cycles run: 5963

Number of cycles run: 1333

Number of cycles run: 1688

Number of cycles run: 17302

Number of cycles run: 3153

Number of cycles run: 3931

Number of cycles run: 2677

Number of cycles run: 6733

Number of cycles run: 1352

Number of cycles run: 1603

Number of cycles run: 8218

Number of cycles run: 3918

Number of cycles run: 1115

Number of cycles run: 1923

Number of cycles run: 3094

Number of cycles run: 50000

Number of cycles run: 4409

Number of cycles run: 2310

Number of cycles run: 2756

Number of cycles run: 820

Number of cycles run: 28075

Number of cycles run: 50000

Number of cycles run: 937

Number of cycles run: 4018

Number of cycles run: 7877

Number of cycles run: 2797

Number of cycles run: 1898

Number of cycles run: 2331

Number of cycles run: 1217

Number of cycles run: 1751

Number of cycles run: 7328

Number of cycles run: 1341

Number of cycles run: 3586

Number of cycles run: 598

Number of cycles run: 12015

Number of cycles run: 36363

Number of cycles run: 2226

Number of cycles run: 50000

Number of cycles run: 2491

Number of cycles run: 6670

Number of cycles run: 15250

Number of cycles run: 2044

Number of cycles run: 2103

Number of cycles run: 50000

Number of cycles run: 1103

Number of cycles run: 3554

Number of cycles run: 1463

Number of cycles run: 6216

Number of cycles run: 7571

Number of cycles run: 28103

Number of cycles run: 2631

Number of cycles run: 1007

Number of cycles run: 3345

Number of cycles run: 2105

Number of cycles run: 5677

Number of cycles run: 2491

Number of cycles run: 388

Number of cycles run: 4596

Number of cycles run: 2991

Number of cycles run: 4416

Number of cycles run: 392

Number of cycles run: 7358

Number of cycles run: 3862

Number of cycles run: 1404

Number of cycles run: 1547

Number of cycles run: 705

Number of cycles run: 4039

Number of cycles run: 2477

Number of cycles run: 460

Number of cycles run: 6266

Number of cycles run: 4555

Number of cycles run: 6588

Number of cycles run: 27370

Number of cycles run: 9037

Number of cycles run: 1479

Number of cycles run: 3664

Number of cycles run: 2779

Number of cycles run: 20453

Number of cycles run: 5662

Number of cycles run: 2572

Number of cycles run: 1325

Number of cycles run: 14856

Number of cycles run: 1001

Number of cycles run: 4251

Number of cycles run: 8555

Number of cycles run: 2548

Number of cycles run: 942

Number of cycles run: 3068

Number of cycles run: 453

Number of cycles run: 14782

Number of cycles run: 24351

Number of cycles run: 4295

Number of cycles run: 25209

Number of cycles run: 3143

Number of cycles run: 3015

Number of cycles run: 50000

Number of cycles run: 5147

Number of cycles run: 3418

Av cycles for repulsion strength 2 is 7871

standard diviation is 11892.0418056

Testing average cycles for repulsion strength 2

Number of cycles run: 4888

Number of cycles run: 850

Number of cycles run: 23330

Number of cycles run: 2680

Number of cycles run: 2090

Number of cycles run: 1707

Number of cycles run: 11288

Number of cycles run: 2637

Number of cycles run: 2818

Number of cycles run: 1561

Number of cycles run: 2821

Number of cycles run: 2195

Number of cycles run: 2469

Number of cycles run: 7649

Number of cycles run: 9991

Number of cycles run: 1133

Number of cycles run: 3182

Number of cycles run: 50000

Number of cycles run: 25815

Number of cycles run: 3622

Number of cycles run: 1214

Number of cycles run: 3018

Number of cycles run: 1689

Number of cycles run: 2694

Number of cycles run: 3927

Number of cycles run: 27389

Number of cycles run: 1794

Number of cycles run: 2497

Number of cycles run: 4677

Number of cycles run: 4201

Number of cycles run: 3624

Number of cycles run: 3483

Number of cycles run: 22974

Number of cycles run: 3338

Number of cycles run: 4982

Number of cycles run: 8754

Number of cycles run: 1564

Number of cycles run: 1173

Number of cycles run: 3320

Number of cycles run: 834

Number of cycles run: 3480

Number of cycles run: 2186

Number of cycles run: 1538

Number of cycles run: 6655

Number of cycles run: 2536

Number of cycles run: 2735

Number of cycles run: 28899

Number of cycles run: 12389

Number of cycles run: 6604

Number of cycles run: 50000

Number of cycles run: 798

Number of cycles run: 1316

Number of cycles run: 1550

Number of cycles run: 3809

Number of cycles run: 17015

Number of cycles run: 1734

Number of cycles run: 3036

Number of cycles run: 6339

Number of cycles run: 7378

Number of cycles run: 1225

Number of cycles run: 1443

Number of cycles run: 3823

Number of cycles run: 622

Number of cycles run: 1723

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

[GCC 7.2.0] on linux

Type "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: /home/cserv1\_a/soc\_msc/ml16m6y/Downloads/schooling\_R1.py =====/8=8975

Testing average cycles for repulsion strength 2

Number of cycles run: 1577

Number of cycles run: 4359

Number of cycles run: 1127

Number of cycles run: 876

Number of cycles run: 4047

Number of cycles run: 1035

Number of cycles run: 939

Number of cycles run: 50000

Number of cycles run: 13074

Number of cycles run: 463

Number of cycles run: 42550

Number of cycles run: 50000

Number of cycles run: 24768

Number of cycles run: 4526

Number of cycles run: 7462

Number of cycles run: 2814

Number of cycles run: 2054

Number of cycles run: 9235

Number of cycles run: 1061

Number of cycles run: 1405

Number of cycles run: 2919

Number of cycles run: 29521

Number of cycles run: 5000

Number of cycles run: 452

Number of cycles run: 539

Number of cycles run: 4684

Number of cycles run: 46721

Number of cycles run: 4551

Number of cycles run: 2464

Number of cycles run: 2081

Number of cycles run: 2766

Number of cycles run: 4711

Number of cycles run: 2370

Number of cycles run: 4623

Number of cycles run: 1813

Number of cycles run: 2421

Number of cycles run: 1883

Number of cycles run: 8367

Number of cycles run: 566

Number of cycles run: 4004

Number of cycles run: 50000

Number of cycles run: 693

Number of cycles run: 1853

Number of cycles run: 465

Number of cycles run: 1989

Number of cycles run: 4506

Number of cycles run: 1407

Number of cycles run: 1134

Number of cycles run: 3313

Number of cycles run: 50000

Number of cycles run: 910

Number of cycles run: 3351

Number of cycles run: 1957

Number of cycles run: 11277

Number of cycles run: 5029

Number of cycles run: 7523

Number of cycles run: 468

Number of cycles run: 12134

Number of cycles run: 3730

Number of cycles run: 7235

Number of cycles run: 2017

Number of cycles run: 6151

Number of cycles run: 453

Number of cycles run: 4890

Number of cycles run: 1363

Number of cycles run: 454

Number of cycles run: 3632

Number of cycles run: 8180

Number of cycles run: 7528

Number of cycles run: 50000

Number of cycles run: 2030

Number of cycles run: 1459

Number of cycles run: 18998

Number of cycles run: 13589

Number of cycles run: 5794

Number of cycles run: 427

Number of cycles run: 26906

Number of cycles run: 1454

Number of cycles run: 10716

Number of cycles run: 30518

Number of cycles run: 18090

Number of cycles run: 945

Number of cycles run: 2948

Number of cycles run: 1262

Number of cycles run: 1590

Number of cycles run: 50000

Number of cycles run: 2396

Number of cycles run: 50000

Number of cycles run: 3173

Number of cycles run: 2232

Number of cycles run: 4256

Number of cycles run: 49603

Number of cycles run: 727

Number of cycles run: 17664

Number of cycles run: 10267

Number of cycles run: 1044

Number of cycles run: 832

Number of cycles run: 1865

Number of cycles run: 3191

Number of cycles run: 2464

Av cycles for repulsion strength 2 is 9459

standard diviation is 14559.9529064

Testing average cycles for repulsion strength 2

Number of cycles run: 3588

Number of cycles run: 4956

Number of cycles run: 16935

Number of cycles run: 658

Number of cycles run: 1172

Number of cycles run: 2922

Number of cycles run: 2591

Number of cycles run: 3493

Number of cycles run: 7045

Number of cycles run: 533

Number of cycles run: 3981

Number of cycles run: 466

Number of cycles run: 3031

Number of cycles run: 4306

Number of cycles run: 5152

Number of cycles run: 16258

Number of cycles run: 50000

Number of cycles run: 4315

Number of cycles run: 2499

Number of cycles run: 2446

Number of cycles run: 3259

Number of cycles run: 4533

Number of cycles run: 1274

Number of cycles run: 2264

Number of cycles run: 1848

Number of cycles run: 3682

Number of cycles run: 5438

Number of cycles run: 1092

Number of cycles run: 6844

Number of cycles run: 982

Number of cycles run: 2725

Number of cycles run: 3344

Number of cycles run: 917

Number of cycles run: 2754

Number of cycles run: 14201

Number of cycles run: 29096

Number of cycles run: 6242

Number of cycles run: 7210

Number of cycles run: 7110

Number of cycles run: 5393

Number of cycles run: 2812

Number of cycles run: 2037

Number of cycles run: 26132

Number of cycles run: 3098

Number of cycles run: 3160

Number of cycles run: 5373

Number of cycles run: 499

Number of cycles run: 10896

Number of cycles run: 2681

Number of cycles run: 2604

Number of cycles run: 5680

Number of cycles run: 3471

Number of cycles run: 7641

Number of cycles run: 1633

Number of cycles run: 11087

Number of cycles run: 4444

Number of cycles run: 6074

Number of cycles run: 50000

Number of cycles run: 5044

Number of cycles run: 2617

Number of cycles run: 4293

Number of cycles run: 3119

Number of cycles run: 1322

Number of cycles run: 3366

Number of cycles run: 2112

Number of cycles run: 3043

Number of cycles run: 2139

Number of cycles run: 2807

Number of cycles run: 50000

Number of cycles run: 20944

Number of cycles run: 1302

Number of cycles run: 50000

Number of cycles run: 5290

Number of cycles run: 11068

Number of cycles run: 996

Number of cycles run: 2289

Number of cycles run: 30169

Number of cycles run: 50000

Number of cycles run: 3641

Number of cycles run: 1078

Number of cycles run: 4403

Number of cycles run: 2390

Number of cycles run: 6034

Number of cycles run: 628

Number of cycles run: 3303

Number of cycles run: 4923

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 28187

Number of cycles run: 3476

Number of cycles run: 2267

Number of cycles run: 2821

Number of cycles run: 2700

Number of cycles run: 2457

Number of cycles run: 6717

Number of cycles run: 1328

Number of cycles run: 1749

Number of cycles run: 2014

Number of cycles run: 3308

Number of cycles run: 50000

Av cycles for repulsion strength 2 is 8812

standard diviation is 13543.9196528

Testing average cycles for repulsion strength 2

Number of cycles run: 1009

Number of cycles run: 47186

Number of cycles run: 6792

Number of cycles run: 1116

Number of cycles run: 797

Number of cycles run: 831

Number of cycles run: 2216

Number of cycles run: 7944

Number of cycles run: 2884

Number of cycles run: 2229

Number of cycles run: 578

Number of cycles run: 437

Number of cycles run: 1084

Number of cycles run: 2492

Number of cycles run: 3305

Number of cycles run: 953

Number of cycles run: 878

Number of cycles run: 2880

Number of cycles run: 5302

Number of cycles run: 4529

Number of cycles run: 1697

Number of cycles run: 3548

Number of cycles run: 8224

Number of cycles run: 686

Number of cycles run: 4532

Number of cycles run: 50000

Number of cycles run: 15911

Number of cycles run: 2612

Number of cycles run: 16947

Number of cycles run: 2011

Number of cycles run: 921

Number of cycles run: 684

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 456

Number of cycles run: 1566

Number of cycles run: 4051

Number of cycles run: 4889

Number of cycles run: 34127

Number of cycles run: 9757

Number of cycles run: 2853

Number of cycles run: 50000

Number of cycles run: 6911

Number of cycles run: 6021

Number of cycles run: 454

Number of cycles run: 2100

Number of cycles run: 5804

Number of cycles run: 12860

Number of cycles run: 3527

Number of cycles run: 6008

Number of cycles run: 1520

Number of cycles run: 3347

Number of cycles run: 9607

Number of cycles run: 3593

Number of cycles run: 6359

Number of cycles run: 2536

Number of cycles run: 2625

Number of cycles run: 2165

Number of cycles run: 2825

Number of cycles run: 3914

Number of cycles run: 3204

Number of cycles run: 2401

Number of cycles run: 892

Number of cycles run: 3784

Number of cycles run: 2897

Number of cycles run: 7782

Number of cycles run: 2388

Number of cycles run: 602

Number of cycles run: 648

Number of cycles run: 1820

Number of cycles run: 2915

Number of cycles run: 43752

Number of cycles run: 3441

Number of cycles run: 1703

Number of cycles run: 2129

Number of cycles run: 609

Number of cycles run: 29263

Number of cycles run: 3042

Number of cycles run: 19456

Number of cycles run: 4848

Number of cycles run: 3199

Number of cycles run: 1459

Number of cycles run: 7590

Number of cycles run: 7608

Number of cycles run: 2841

Number of cycles run: 992

Number of cycles run: 23859

Number of cycles run: 50000

Number of cycles run: 50000

Number of cycles run: 1204

Number of cycles run: 4249

Number of cycles run: 3420

Number of cycles run: 3746

Number of cycles run: 50000

Number of cycles run: 4925

Number of cycles run: 475

Number of cycles run: 5018

Number of cycles run: 2373

Number of cycles run: 818

Number of cycles run: 6666

Av cycles for repulsion strength 2 is 8611

standard diviation is 13924.7238818

Testing average cycles for repulsion strength 2

Number of cycles run: 13324

Number of cycles run: 5537

Number of cycles run: 7337

Number of cycles run: 2308

Number of cycles run: 4467

Number of cycles run: 3732

Number of cycles run: 3252

Number of cycles run: 2186

Number of cycles run: 8767

Number of cycles run: 1161

Number of cycles run: 2283

Number of cycles run: 5782

Number of cycles run: 3327

Number of cycles run: 2004

Number of cycles run: 2741

Number of cycles run: 2220

Number of cycles run: 21902

Number of cycles run: 5553

Number of cycles run: 2765

Number of cycles run: 3836

Number of cycles run: 718

Number of cycles run: 3269

Number of cycles run: 5757

Number of cycles run: 4840

Number of cycles run: 2262

Number of cycles run: 2818

Number of cycles run: 4842

Number of cycles run: 887

Number of cycles run: 2853

Number of cycles run: 1063

Number of cycles run: 50000

Number of cycles run: 3120

Number of cycles run: 7350

Number of cycles run: 4398

Number of cycles run: 16229

Number of cycles run: 3002

Number of cycles run: 15712

Number of cycles run: 929

Number of cycles run: 2166

Number of cycles run: 50000

Number of cycles run: 33240

Number of cycles run: 2807

Number of cycles run: 1279

Number of cycles run: 48619

Number of cycles run: 8961

Number of cycles run: 5261

Number of cycles run: 2566

Number of cycles run: 789

Number of cycles run: 9212

Number of cycles run: 4036

Number of cycles run: 1214

Number of cycles run: 754

Number of cycles run: 50000

Number of cycles run: 3924

Number of cycles run: 1788

Number of cycles run: 2311

Number of cycles run: 50000

Number of cycles run: 2745

Number of cycles run: 6913

Number of cycles run: 2798

Number of cycles run: 7612

Number of cycles run: 2684

Number of cycles run: 4242

Number of cycles run: 453

Number of cycles run: 3658

Number of cycles run: 2061

Number of cycles run: 2651

Number of cycles run: 1499

Number of cycles run: 14447

Number of cycles run: 2937

Number of cycles run: 1704

Number of cycles run: 1296

Number of cycles run: 392

Number of cycles run: 4114

Number of cycles run: 769

Number of cycles run: 3519

Number of cycles run: 2768

Number of cycles run: 6514

Number of cycles run: 3434

Number of cycles run: 2417

Number of cycles run: 3349

Number of cycles run: 1220

Number of cycles run: 5849

Number of cycles run: 50000

Number of cycles run: 4002

Number of cycles run: 1200

Number of cycles run: 594

Number of cycles run: 14987

Number of cycles run: 8360

Number of cycles run: 3351

Number of cycles run: 678

Number of cycles run: 3460

Number of cycles run: 2013

Number of cycles run: 50000

Number of cycles run: 2633

Number of cycles run: 6692

Number of cycles run: 4228

Number of cycles run: 9072

Number of cycles run: 1355

Number of cycles run: 2473

Av cycles for repulsion strength 2 is 7706

standard diviation is 12528.0410566

Testing average cycles for repulsion strength 2

Number of cycles run: 1537

Number of cycles run: 11919

Number of cycles run: 599

Number of cycles run: 545

Number of cycles run: 5117

Number of cycles run: 3024

Number of cycles run: 50000

Number of cycles run: 4433

Number of cycles run: 3373

Number of cycles run: 1185

Number of cycles run: 6290

Number of cycles run: 459

Number of cycles run: 12545

Number of cycles run: 22770

Number of cycles run: 45809

Number of cycles run: 8837

Number of cycles run: 2738

Number of cycles run: 50000

Number of cycles run: 3904

Number of cycles run: 50000

Number of cycles run: 2720

Number of cycles run: 805

Number of cycles run: 8505

Number of cycles run: 8387

Number of cycles run: 3671

Number of cycles run: 1971

Number of cycles run: 1938

Number of cycles run: 3230

Number of cycles run: 1186

Number of cycles run: 4015

Number of cycles run: 50000

Number of cycles run: 1811

Number of cycles run: 9316

Number of cycles run: 34860

Number of cycles run: 1592

Number of cycles run: 376

Number of cycles run: 459

Number of cycles run: 1354

Number of cycles run: 1519

Number of cycles run: 454

Number of cycles run: 12851

Number of cycles run: 50000

Number of cycles run: 2319

Number of cycles run: 1306

Number of cycles run: 5245

Number of cycles run: 1282

Number of cycles run: 697

Number of cycles run: 3255

Number of cycles run: 8367

Number of cycles run: 5658

Number of cycles run: 50000

Number of cycles run: 3512

Number of cycles run: 50000

Number of cycles run: 811

Number of cycles run: 2784

Number of cycles run: 1755

Number of cycles run: 1788

Number of cycles run: 2039