C:\Users\yaels\anaconda3\envs\Gymmy\python.exe "C:\Users\yaels\יעל פרוייקט גמר\zedcheck\main.py"

pygame 2.5.2 (SDL 2.28.3, Python 3.11.9)

Hello from the pygame community. https://www.pygame.org/contribute.html

CAMERA INITIALIZATION

ROBOT INITIALIZATION

screen start

CAMERA START

MP INITIALIZATION

ROBOT START

MP START

User ID entered: 55581599

C:\Users\yaels\יעל פרוייקט גמר\zedcheck\ScreenNew.py:139: FutureWarning: Setting an item of incompatible dtype is deprecated and will raise in a future error of pandas. Value '0 314808981

1 11223344

2 31480898

3 55581599

4 1111

Name: ID, dtype: object' has dtype incompatible with int64, please explicitly cast to a compatible dtype first.

df.iloc[:, 0] = df.iloc[:, 0].astype(str)

C:\Users\yaels\יעל פרוייקט גמר\zedcheck\ScreenNew.py:183: FutureWarning: Setting an item of incompatible dtype is deprecated and will raise in a future error of pandas. Value '0 314808981

1 11223344

2 43372

3 4327

4 55581599

5 43817

Name: ID, dtype: object' has dtype incompatible with int64, please explicitly cast to a compatible dtype first.

df1.iloc[:, 0] = df1.iloc[:, 0].astype(str)

['open\_arms\_above\_head\_ball', 'arms\_up\_and\_down\_stick']

Training: start exercises

CAMERA: Exercise hello\_waving start

CAMERA: Exercise hello\_waving done

TRAINING: Exercise open\_arms\_above\_head\_ball start

CAMERA: Exercise open\_arms\_above\_head\_ball start

ROBOT: Exercise open\_arms\_above\_head\_ball start

84.79 82.56

169.23 167.57

first angle mean: 84.79

first angle stdev: 0.0

second angle mean: 169.23

second angle stdev: 0.0

84.56 75.4

171.83 165.28

first angle mean: 84.675

first angle stdev: 0.11500168

second angle mean: 170.53

second angle stdev: 1.300003

83.4 82.69

168.81 168.59

first angle mean: 84.25

first angle stdev: 0.6083302

second angle mean: 169.95667

second angle stdev: 1.3357003

82.9 83.16

167.14 166.71

first angle mean: 83.9125

first angle stdev: 0.7869353

second angle mean: 169.2525

second angle stdev: 1.6809589

83.02 83.09

166.76 164.91

first angle mean: 83.73399

first angle stdev: 0.78921723

second angle mean: 168.754

second angle stdev: 1.8040261

82.76 83.42

166.7 162.69

first angle mean: 83.57166

first angle stdev: 0.80672985

second angle mean: 168.41167

second angle stdev: 1.8160542

83.44 83.4

167.38 160.66

first angle mean: 83.55286

first angle stdev: 0.7483064

second angle mean: 168.2643

second angle stdev: 1.7196592

84.0 85.22

166.9 160.45

first angle mean: 83.60875

first angle stdev: 0.7154266

second angle mean: 168.09375

second angle stdev: 1.6706742

84.85 85.96

165.66 160.59

first angle mean: 83.746666

first angle stdev: 0.7791869

second angle mean: 167.82333

second angle stdev: 1.7510064

84.97 87.15

166.23 164.99

first angle mean: 83.868996

first angle stdev: 0.8252928

second angle mean: 167.664

second angle stdev: 1.7285558

85.66 87.67

172.99 170.6

first angle mean: 84.031815

first angle stdev: 0.94036585

second angle mean: 168.14818

second angle stdev: 2.2495787

86.27 86.46

179.85 175.14

first angle mean: 84.21833

first angle stdev: 1.0923657

second angle mean: 169.12334

second angle stdev: 3.8857462

86.39 86.45

177.54 179.52

first angle mean: 84.38538

first angle stdev: 1.1984769

second angle mean: 169.77077

second angle stdev: 4.3551846

88.21 86.39

177.5 178.09

first angle mean: 84.65857

first angle stdev: 1.5178779

second angle mean: 170.32286

second angle stdev: 4.6449127

88.53 85.34

178.08 168.1

first angle mean: 84.916664

first angle stdev: 1.7558303

second angle mean: 170.84001

second angle stdev: 4.8868175

87.43 86.01

178.53 163.78

first angle mean: 85.073746

first angle stdev: 1.8056533

second angle mean: 171.32062

second angle stdev: 5.0846267

87.04 88.03

178.68 168.71

first angle mean: 85.18941

first angle stdev: 1.8118055

second angle mean: 171.75352

second angle stdev: 5.2279186

87.39 88.97

178.73 163.21

first angle mean: 85.31167

first angle stdev: 1.8314903

second angle mean: 172.1411

second angle stdev: 5.326018

88.77 89.73

178.91 159.4

first angle mean: 85.49368

first angle stdev: 1.9427191

second angle mean: 172.49736

second angle stdev: 5.399819

92.95 90.0

169.04 153.06

first angle mean: 85.8665

first angle stdev: 2.495253

second angle mean: 172.3245

second angle stdev: 5.3167596

98.34 93.24

152.2 141.56

first angle mean: 86.46047

first angle stdev: 3.603602

second angle mean: 171.36618

second angle stdev: 6.729709

104.06 99.71

139.73 131.54

first angle mean: 87.26045

first angle stdev: 5.0828094

second angle mean: 169.92816

second angle stdev: 9.308902

107.63 104.49

134.32 125.98

first angle mean: 88.14609

first angle stdev: 6.478215

second angle mean: 168.37999

second angle stdev: 11.645559

108.25 107.31

133.91 125.25

first angle mean: 88.98374

first angle stdev: 7.5071473

second angle mean: 166.94376

second angle stdev: 13.319646

106.98 106.39

135.49 126.41

first angle mean: 89.70359

first angle stdev: 8.157168

second angle mean: 165.68561

second angle stdev: 14.432846

102.59 100.53

138.65 123.61

first angle mean: 90.19923

first angle stdev: 8.373854

second angle mean: 164.64577

second angle stdev: 15.077349

90.85 92.29

146.23 113.77

first angle mean: 90.223335

first angle stdev: 8.218238

second angle mean: 163.9637

second angle stdev: 15.198767

75.7 84.81

156.35 108.87

first angle mean: 89.70464

first angle stdev: 8.508314

second angle mean: 163.69179

second angle stdev: 14.991623

69.2 80.09

162.82 109.12

first angle mean: 88.99758

first angle stdev: 9.159321

second angle mean: 163.66173

second angle stdev: 14.731739

69.13 76.01

165.88 121.07

first angle mean: 88.33533

first angle stdev: 9.685841

second angle mean: 163.73566

second angle stdev: 14.489601

74.29 76.77

164.54 142.1

first angle mean: 87.882256

first angle stdev: 9.846193

second angle mean: 163.76161

second angle stdev: 14.254691

81.37 78.46

160.25 152.41

first angle mean: 87.67875

first angle stdev: 9.75714

second angle mean: 163.65187

second angle stdev: 14.04349

83.67 83.2

157.07 161.88

first angle mean: 87.55727

first angle stdev: 9.6327095

second angle mean: 163.45241

second angle stdev: 13.875023

84.68 86.44

155.13 163.28

first angle mean: 87.47264

first angle stdev: 9.5024395

second angle mean: 163.20764

second angle stdev: 13.741587

85.75 88.6

158.15 178.14

first angle mean: 87.42342

first angle stdev: 9.370101

second angle mean: 163.06313

second angle stdev: 13.570042

85.59 87.02

164.7 177.0

first angle mean: 87.3725

first angle stdev: 9.243957

second angle mean: 163.1086

second angle stdev: 13.382945

81.84 82.25

178.58 171.89

first angle mean: 87.22298

first angle stdev: 9.162213

second angle mean: 163.52675

second angle stdev: 13.437152

81.31 74.27

176.95 171.99

first angle mean: 87.06737

first angle stdev: 9.090264

second angle mean: 163.88

second angle stdev: 13.432141

77.82 68.53

177.65 174.07

first angle mean: 86.83026

first angle stdev: 9.091236

second angle mean: 164.23308

second angle stdev: 13.436273

76.56 65.79

178.53 174.75

first angle mean: 86.5735

first angle stdev: 9.118955

second angle mean: 164.5905

second angle stdev: 13.453712

76.61 65.38

178.87 174.43

first angle mean: 86.33049

first angle stdev: 9.137251

second angle mean: 164.93878

second angle stdev: 13.469954

78.48 66.65

178.92 174.72

first angle mean: 86.14357

first angle stdev: 9.106808

second angle mean: 165.27167

second angle stdev: 13.478242

79.76 68.7

178.88 174.35

first angle mean: 85.99512

first angle stdev: 9.051569

second angle mean: 165.58813

second angle stdev: 13.477566

80.7 70.27

178.81 173.83

first angle mean: 85.87477

first angle stdev: 8.982849

second angle mean: 165.88864

second angle stdev: 13.468457

80.79 71.36

178.79 174.45

first angle mean: 85.76178

first angle stdev: 8.914045

second angle mean: 166.17534

second angle stdev: 13.45306

80.58 71.25

178.79 174.84

first angle mean: 85.64913

first angle stdev: 8.848946

second angle mean: 166.44957

second angle stdev: 13.432591

79.98 70.97

178.83 174.6

first angle mean: 85.52851

first angle stdev: 8.792443

second angle mean: 166.71298

second angle stdev: 13.408477

79.2 70.8

178.87 173.81

first angle mean: 85.39667

first angle stdev: 8.747199

second angle mean: 166.96625

second angle stdev: 13.381202

78.89 70.61

178.9 172.49

first angle mean: 85.26388

first angle stdev: 8.706226

second angle mean: 167.20981

second angle stdev: 13.351008

79.17 70.83

178.9 171.21

first angle mean: 85.142

first angle stdev: 8.660847

second angle mean: 167.44362

second angle stdev: 13.31777

79.35 71.48

178.93 170.58

first angle mean: 85.028435

first angle stdev: 8.613034

second angle mean: 167.66882

second angle stdev: 13.282379

79.82 71.85

178.91 169.59

first angle mean: 84.92827

first angle stdev: 8.559754

second angle mean: 167.88501

second angle stdev: 13.244328

80.43 72.55

178.9 169.1

first angle mean: 84.8434

first angle stdev: 8.500678

second angle mean: 168.09285

second angle stdev: 13.204112

81.15 72.83

178.82 168.24

first angle mean: 84.775

first angle stdev: 8.436308

second angle mean: 168.2915

second angle stdev: 13.160982

81.56 72.96

178.77 170.07

first angle mean: 84.716545

first angle stdev: 8.370292

second angle mean: 168.48201

second angle stdev: 13.115722

82.04 72.25

178.72 171.47

first angle mean: 84.668755

first angle stdev: 8.302791

second angle mean: 168.66483

second angle stdev: 13.068614

82.37 71.04

178.72 170.97

first angle mean: 84.628426

first angle stdev: 8.235168

second angle mean: 168.84123

second angle stdev: 13.020562

82.41 70.55

178.74 171.75

first angle mean: 84.59018

first angle stdev: 8.168972

second angle mean: 169.0119

second angle stdev: 12.971982

82.51 70.09

178.76 172.37

first angle mean: 84.55492

first angle stdev: 8.103897

second angle mean: 169.17712

second angle stdev: 12.922985

82.48 69.93

178.77 172.18

first angle mean: 84.52034

first angle stdev: 8.04047

second angle mean: 169.33699

second angle stdev: 12.873551

81.95 70.48

178.79 172.39

first angle mean: 84.4782

first angle stdev: 7.980969

second angle mean: 169.49196

second angle stdev: 12.823898

81.63 71.35

178.84 172.25

first angle mean: 84.43227

first angle stdev: 7.9244714

second angle mean: 169.64273

second angle stdev: 12.774451

81.56 72.43

178.87 172.12

first angle mean: 84.38667

first angle stdev: 7.8695197

second angle mean: 169.7892

second angle stdev: 12.72503

81.33 72.96

178.87 171.2

first angle mean: 84.338905

first angle stdev: 7.8169937

second angle mean: 169.93109

second angle stdev: 12.675353

81.26 72.9

178.87 170.9

first angle mean: 84.291534

first angle stdev: 7.765881

second angle mean: 170.06862

second angle stdev: 12.625497

81.79 72.47

178.84 171.13

first angle mean: 84.25363

first angle stdev: 7.7128797

second angle mean: 170.2015

second angle stdev: 12.575215

82.18 72.36

178.83 170.86

first angle mean: 84.22269

first angle stdev: 7.659233

second angle mean: 170.33029

second angle stdev: 12.524793

82.18 72.34

178.82 169.75

first angle mean: 84.19265

first angle stdev: 7.6066813

second angle mean: 170.45515

second angle stdev: 12.474287

82.05 72.69

178.82 169.85

first angle mean: 84.16159

first angle stdev: 7.5557

second angle mean: 170.57639

second angle stdev: 12.423849

82.02 72.58

178.84 172.39

first angle mean: 84.131

first angle stdev: 7.50584

second angle mean: 170.69443

second angle stdev: 12.373707

81.37 72.69

178.88 173.37

first angle mean: 84.09211

first angle stdev: 7.459893

second angle mean: 170.80972

second angle stdev: 12.324065

81.33 72.93

178.9 173.33

first angle mean: 84.05375

first angle stdev: 7.414956

second angle mean: 170.92207

second angle stdev: 12.274751

81.28 73.08

178.87 171.3

first angle mean: 84.015755

first angle stdev: 7.371048

second angle mean: 171.03096

second angle stdev: 12.225345

81.39 72.85

178.84 170.99

first angle mean: 83.98027

first angle stdev: 7.3273487

second angle mean: 171.13647

second angle stdev: 12.175888

81.83 73.14

178.8 171.51

first angle mean: 83.9516

first angle stdev: 7.2825136

second angle mean: 171.23866

second angle stdev: 12.126342

83.31 73.98

178.77 178.18

first angle mean: 83.94316

first angle stdev: 7.2348127

second angle mean: 171.33775

second angle stdev: 12.076831

84.91 74.92

178.76 175.43

first angle mean: 83.95572

first angle stdev: 7.1885133

second angle mean: 171.43414

second angle stdev: 12.027546

87.22 77.06

178.74 171.52

first angle mean: 83.997574

first angle stdev: 7.151719

second angle mean: 171.5278

second angle stdev: 11.978428

90.22 80.53

178.64 169.06

first angle mean: 84.07634

first angle stdev: 7.140278

second angle mean: 171.61783

second angle stdev: 11.928901

93.64 87.55

178.5 167.32

first angle mean: 84.19588

first angle stdev: 7.174627

second angle mean: 171.70389

second angle stdev: 11.878746

100.66 97.9

178.33 167.49

first angle mean: 84.39914

first angle stdev: 7.358327

second angle mean: 171.78569

second angle stdev: 11.827845

113.06 111.07

178.32 164.66

first angle mean: 84.74866

first angle stdev: 7.961163

second angle mean: 171.86537

second angle stdev: 11.777359

125.88 124.62

178.45 159.09

first angle mean: 85.24422

first angle stdev: 9.096917

second angle mean: 171.94472

second angle stdev: 11.728219

139.76 133.61

178.5 151.12

first angle mean: 85.89321

first angle stdev: 10.80408

second angle mean: 172.02275

second angle stdev: 11.679858

140.37 138.78

169.67 149.31

first angle mean: 86.53412

first angle stdev: 12.241669

second angle mean: 171.99507

second angle stdev: 11.613721

126.21 144.05

146.4 144.69

first angle mean: 86.99546

first angle stdev: 12.892147

second angle mean: 171.69746

second angle stdev: 11.867565

121.82 148.46

131.8 140.47

first angle mean: 87.395744

first angle stdev: 13.344527

second angle mean: 171.23886

second angle stdev: 12.542192

120.24 150.96

126.61 136.36

first angle mean: 87.768974

first angle stdev: 13.717579

second angle mean: 170.7317

second angle stdev: 13.337734

robot count: 1119.61

151.16

125.55 132.56

first angle mean: 88.12674

first angle stdev: 14.047109

second angle mean: 170.22404

second angle stdev: 14.091683

119.01 150.3

124.45 131.36

first angle mean: 88.46989

first angle stdev: 14.339059

second angle mean: 169.71544

second angle stdev: 14.811859

118.59 149.05

126.08 129.88

first angle mean: 88.80087

first angle stdev: 14.601681

second angle mean: 169.23593

second angle stdev: 15.416678

117.3 147.25

126.4 130.47

first angle mean: 89.11065

first angle stdev: 14.819712

second angle mean: 168.77032

second angle stdev: 15.963037

115.66 146.46

127.73 133.66

first angle mean: 89.396126

first angle stdev: 14.992

second angle mean: 168.32904

second angle stdev: 16.431515

114.94 146.34

128.26 135.7

first angle mean: 89.66788

first angle stdev: 15.140558

second angle mean: 167.90277

second angle stdev: 16.852915

115.0 146.27

131.93 135.91

first angle mean: 89.93453

first angle stdev: 15.280946

second angle mean: 167.52411

second angle stdev: 17.161268

116.26 146.62

136.64 134.74

first angle mean: 90.20875

first angle stdev: 15.43434

second angle mean: 167.2024

second angle stdev: 17.357233

117.89 146.72

139.17 134.24

first angle mean: 90.49412

first angle stdev: 15.607082

second angle mean: 166.91339

second angle stdev: 17.498152

119.12 146.62

139.3 134.98

first angle mean: 90.786224

first angle stdev: 15.791511

second angle mean: 166.63162

second angle stdev: 17.628448

118.85 145.08

136.07 134.99

first angle mean: 91.069695

first angle stdev: 15.9601965

second angle mean: 166.32292

second angle stdev: 17.803436

118.58 143.93

135.63 134.72

first angle mean: 91.344795

first angle stdev: 16.114376

second angle mean: 166.01599

second angle stdev: 17.975513

117.0 140.95

138.53 135.5

first angle mean: 91.59881

first angle stdev: 16.234354

second angle mean: 165.74385

second angle stdev: 18.092148

115.8 134.26

144.39 135.22

first angle mean: 91.836075

first angle stdev: 16.32961

second angle mean: 165.5345

second angle stdev: 18.125767

111.78 126.87

152.15 132.87

first angle mean: 92.0297

first angle stdev: 16.367393

second angle mean: 165.40456

second angle stdev: 18.085243

103.14 114.83

160.71 140.55

first angle mean: 92.13654

first angle stdev: 16.324558

second angle mean: 165.3594

second angle stdev: 18.003914

93.77 102.42

166.65 154.26

first angle mean: 92.15209

first angle stdev: 16.247412

second angle mean: 165.3717

second angle stdev: 17.918415

89.61 89.98

173.81 164.88

first angle mean: 92.12811

first angle stdev: 16.172459

second angle mean: 165.45132

second angle stdev: 17.85234

85.15 79.42

178.95 171.49

first angle mean: 92.062904

first angle stdev: 16.110706

second angle mean: 165.57747

second angle stdev: 17.81613

79.27 72.42

177.0 171.92

first angle mean: 91.94444

first angle stdev: 16.082687

second angle mean: 165.68323

second angle stdev: 17.767172

76.19 67.29

177.12 171.86

first angle mean: 91.79991

first angle stdev: 16.079058

second angle mean: 165.78815

second angle stdev: 17.719067

71.91 64.92

178.21 173.08

first angle mean: 91.619095

first angle stdev: 16.116747

second angle mean: 165.90108

second angle stdev: 17.6777

70.67 63.56

178.85 174.48

first angle mean: 91.43037

first angle stdev: 16.16563

second angle mean: 166.01773

second angle stdev: 17.640371

71.91 64.64

179.04 175.06

first angle mean: 91.256065

first angle stdev: 16.197718

second angle mean: 166.13402

second angle stdev: 17.604115

74.53 67.45

179.02 174.46

first angle mean: 91.108055

first angle stdev: 16.201794

second angle mean: 166.24805

second angle stdev: 17.56755

77.23 70.24

179.0 173.02

first angle mean: 90.98632

first angle stdev: 16.182402

second angle mean: 166.35991

second angle stdev: 17.530703

83.06 74.3

178.97 171.87

first angle mean: 90.91739

first angle stdev: 16.128689

second angle mean: 166.46956

second angle stdev: 17.493536

91.47 83.41

178.7 176.17

first angle mean: 90.92215

first angle stdev: 16.0591

second angle mean: 166.575

second angle stdev: 17.45463

110.62 101.28

175.74 174.4

first angle mean: 91.090515

first angle stdev: 16.092804

second angle mean: 166.65334

second angle stdev: 17.400343

136.38 124.57

170.54 169.81

first angle mean: 91.47432

first angle stdev: 16.553514

second angle mean: 166.68626

second angle stdev: 17.330118

150.29 137.08

169.32 165.69

first angle mean: 91.96857

first angle stdev: 17.336132

second angle mean: 166.70839

second angle stdev: 17.258821

159.21 144.87

170.9 163.7

first angle mean: 92.52892

first angle stdev: 18.313969

second angle mean: 166.74333

second angle stdev: 17.190985

161.49 149.46

171.48 164.21

first angle mean: 93.098854

first angle stdev: 19.277122

second angle mean: 166.78247

second angle stdev: 17.12517

counter:1

161.4 154.89

179.57 165.35

first angle mean: 93.6587

first angle stdev: 20.1615

second angle mean: 166.8873

second angle stdev: 17.093771

161.21 157.42

178.34 163.8

first angle mean: 94.20789

first angle stdev: 20.975672

second angle mean: 166.98041

second angle stdev: 17.055178

159.52 159.07

178.13 161.1

first angle mean: 94.734604

first angle stdev: 21.692251

second angle mean: 167.07033

second angle stdev: 17.015512

161.74 160.47

178.35 157.36

first angle mean: 95.270645

first angle stdev: 22.414722

second angle mean: 167.16057

second angle stdev: 16.977077

162.05 160.68

178.75 155.32

first angle mean: 95.800644

first angle stdev: 23.098574

second angle mean: 167.25255

second angle stdev: 16.940815

160.73 160.67

179.13 156.2

first angle mean: 96.3119

first angle stdev: 23.712381

second angle mean: 167.34607

second angle stdev: 16.906612

159.59 162.17

179.2 156.49

first angle mean: 96.80626

first angle stdev: 24.267715

second angle mean: 167.43866

second angle stdev: 16.87275

159.83 163.79

179.05 152.9

first angle mean: 97.29481

first angle stdev: 24.797354

second angle mean: 167.52867

second angle stdev: 16.838047

159.34 164.22

179.0 152.25

first angle mean: 97.77208

first angle stdev: 25.289587

second angle mean: 167.61691

second angle stdev: 16.803074

157.84 164.16

179.02 152.62

first angle mean: 98.23061

first angle stdev: 25.729633

second angle mean: 167.70396

second angle stdev: 16.768215

158.12 163.37

179.01 152.25

first angle mean: 98.68432

first angle stdev: 26.152727

second angle mean: 167.78963

second angle stdev: 16.73332

157.8 162.63

179.0 153.61

first angle mean: 99.1288

first angle stdev: 26.549965

second angle mean: 167.87392

second angle stdev: 16.698399

157.6 162.78

179.01 154.8

first angle mean: 99.565155

first angle stdev: 26.925154

second angle mean: 167.957

second angle stdev: 16.663559

157.81 164.31

179.03 152.0

first angle mean: 99.99659

first angle stdev: 27.286203

second angle mean: 168.03903

second angle stdev: 16.628857

156.87 165.77

178.98 149.41

first angle mean: 100.41478

first angle stdev: 27.616503

second angle mean: 168.11949

second angle stdev: 16.593956

157.31 166.08

179.01 149.6

first angle mean: 100.83006

first angle stdev: 27.938505

second angle mean: 168.19897

second angle stdev: 16.559254

155.62 166.37

179.2 150.1

first angle mean: 101.2271

first angle stdev: 28.22232

second angle mean: 168.2787

second angle stdev: 16.525509

154.91robot count: 2

166.26

179.16 149.81

first angle mean: 101.61331

first angle stdev: 28.484253

second angle mean: 168.35698

second angle stdev: 16.491617

157.12 164.22

179.03 150.88

first angle mean: 102.00978

first angle stdev: 28.764688

second angle mean: 168.43321

second angle stdev: 16.457176

154.66 160.67

178.96 151.5

first angle mean: 102.38319

first angle stdev: 29.001028

second angle mean: 168.50787

second angle stdev: 16.42249

145.47 152.25

179.1 151.9

first angle mean: 102.68662

first angle stdev: 29.12247

second angle mean: 168.58247

second angle stdev: 16.388514

137.41 138.68

179.07 153.07

first angle mean: 102.92944

first angle stdev: 29.164362

second angle mean: 168.6558

second angle stdev: 16.354477

130.52 127.76

179.01 156.55

first angle mean: 103.12104

first angle stdev: 29.153095

second angle mean: 168.7277

second angle stdev: 16.32026

121.19 116.84

165.02 162.74

first angle mean: 103.24566

first angle stdev: 29.090853

second angle mean: 168.70213

second angle stdev: 16.266779

108.45 106.18

155.14 169.42

first angle mean: 103.2813

first angle stdev: 28.994234

second angle mean: 168.60924

second angle stdev: 16.24952

99.46 97.89

158.8 175.11

first angle mean: 103.25531

first angle stdev: 28.897152

second angle mean: 168.54251

second angle stdev: 16.214216

91.39 86.45

161.12 174.69

first angle mean: 103.17513

first angle stdev: 28.81576

second angle mean: 168.49236

second angle stdev: 16.17078

86.65 79.18

165.11 179.98

first angle mean: 103.06423

first angle stdev: 28.750578

second angle mean: 168.46967

second angle stdev: 16.118792

85.22 76.99

168.81 178.28

first angle mean: 102.94527

first angle stdev: 28.691353

second angle mean: 168.47192

second angle stdev: 16.064995

84.5 72.96

174.27 178.6

first angle mean: 102.82311

first angle stdev: 28.6353

second angle mean: 168.51031

second angle stdev: 16.018616

83.46 72.02

178.65 178.84

first angle mean: 102.695724

first angle stdev: 28.583843

second angle mean: 168.57704

second angle stdev: 15.986866

81.66 70.94

178.29 176.41

first angle mean: 102.558235

first angle stdev: 28.540659

second angle mean: 168.64052

second angle stdev: 15.953747

80.06 69.32

178.64 178.32

first angle mean: 102.41214

first angle stdev: 28.50518

second angle mean: 168.70546

second angle stdev: 15.922134

77.64 67.77

178.98 179.98

first angle mean: 102.25232

first angle stdev: 28.482216

second angle mean: 168.77174

second angle stdev: 15.8919935

74.57 66.34

179.64 179.98

first angle mean: 102.07487

first angle stdev: 28.476608

second angle mean: 168.84142

second angle stdev: 15.864703

71.85 65.8

179.68 179.35

first angle mean: 101.882355

first angle stdev: 28.487432

second angle mean: 168.91045

second angle stdev: 15.837588

71.14 65.68

179.19 179.5

first angle mean: 101.687775

first angle stdev: 28.5016

second angle mean: 168.9755

second angle stdev: 15.808422

72.28 66.56

179.7 177.92

first angle mean: 101.50282

first angle stdev: 28.506788

second angle mean: 169.04295

second angle stdev: 15.781422

73.58 67.51

179.6 177.85

first angle mean: 101.32831

first angle stdev: 28.502642

second angle mean: 169.10893

second angle stdev: 15.754013

74.67 68.68

179.35 177.65

first angle mean: 101.16273

first angle stdev: 28.491076

second angle mean: 169.17255

second angle stdev: 15.725609

75.32 69.35

179.11 177.86

first angle mean: 101.003204

first angle stdev: 28.475037

second angle mean: 169.23389

second angle stdev: 15.696308

75.27 69.73

179.0 178.24

first angle mean: 100.84533

first angle stdev: 28.458582

second angle mean: 169.29381

second angle stdev: 15.666656

75.75 69.91

179.11 178.99

first angle mean: 100.692314

first angle stdev: 28.438868

second angle mean: 169.35365

second angle stdev: 15.637503

77.25 70.58

179.33 179.46

first angle mean: 100.55024

first angle stdev: 28.410877

second angle mean: 169.41412

second angle stdev: 15.609261

80.41 71.83

179.13 178.62

first angle mean: 100.42891

first angle stdev: 28.368015

second angle mean: 169.47266

second angle stdev: 15.580324

85.18 74.59

178.96 176.95

first angle mean: 100.3376

first angle stdev: 28.307411

second angle mean: 169.52946

second angle stdev: 15.550842

89.57 79.02

178.85 176.51

first angle mean: 100.273506

first angle stdev: 28.235188

second angle mean: 169.58493

second angle stdev: 15.521057

93.5 88.57

178.67 179.21

first angle mean: 100.23343

first angle stdev: 28.156319

second angle mean: 169.6387

second angle stdev: 15.4907465

99.3 99.67

178.45 179.15

first angle mean: 100.22794

first angle stdev: 28.073477

second angle mean: 169.69054

second angle stdev: 15.45981

106.55 109.67

178.31 179.67

first angle mean: 100.26491

first angle stdev: 27.99542

second angle mean: 169.74094

second angle stdev: 15.428544

115.41 117.39

178.33 179.01

first angle mean: 100.35296

first angle stdev: 27.937656

second angle mean: 169.79086

second angle stdev: 15.397482

123.88 122.96

178.43 178.28

first angle mean: 100.48896

first angle stdev: 27.913834

second angle mean: 169.8408

second angle stdev: 15.3668785

134.62 130.2

178.54 179.43

first angle mean: 100.68511

first angle stdev: 27.95283

second angle mean: 169.89081

second angle stdev: 15.3367605

143.82 137.56

178.61 179.69

first angle mean: 100.931595

first angle stdev: 28.061844

second angle mean: 169.94063

second angle stdev: 15.3069935

146.04 141.37

178.93 174.61

first angle mean: 101.1879

first angle stdev: 28.186668

second angle mean: 169.9917

second angle stdev: 15.278395

138.21 146.12

170.81 172.2

first angle mean: 101.39707

first angle stdev: 28.243576

second angle mean: 169.99632

second angle stdev: 15.235298

133.86 149.23

158.21 167.59

first angle mean: 101.579445

first angle stdev: 28.268452

second angle mean: 169.9301

second angle stdev: 15.21796

129.61 153.16

145.74 160.79

first angle mean: 101.73603

first angle stdev: 28.266695

second angle mean: 169.79498

second angle stdev: 15.2821245

127.3 155.42

137.87 158.07

first angle mean: 101.87806

first angle stdev: 28.252035

second angle mean: 169.61761

second angle stdev: 15.423251

126.65 156.29

137.32 156.73

first angle mean: 102.01492

first angle stdev: 28.233656

second angle mean: 169.43918

second angle stdev: 15.565788

128.64 157.75

144.31 155.04

first angle mean: 102.16121

first angle stdev: 28.22469

second angle mean: 169.3011

second angle stdev: 15.633716

129.93 158.36

148.06 154.46

first angle mean: 102.31295

first angle stdev: 28.22181

second angle mean: 169.18503

second angle stdev: 15.66938

124.95 157.8

144.45 155.72

first angle mean: 102.435974

first angle stdev: 28.194178

second angle mean: 169.05058

second angle stdev: 15.7322

121.88 157.81

141.76 155.59

first angle mean: 102.54108

first angle stdev: 28.153996

second angle mean: 168.90308

second angle stdev: 15.816711

119.27 157.43

137.94 154.41

first angle mean: 102.63102

first angle stdev: 28.104847

second angle mean: 168.73662

second angle stdev: 15.935809

118.59 157.28

138.04 153.96

first angle mean: 102.71636

first angle stdev: 28.053755

second angle mean: 168.57246

second angle stdev: 16.050045

119.53 157.43

138.52 153.53

first angle mean: 102.805786

first angle stdev: 28.00576

second angle mean: 168.41261

second angle stdev: 16.15587

119.05 157.05

137.21 156.09

first angle mean: 102.89174

first angle stdev: 27.956423

second angle mean: 168.24751

second angle stdev: 16.271301

120.95 155.87

137.27 160.15

first angle mean: 102.98678

first angle stdev: 27.913355

second angle mean: 168.08447

second angle stdev: 16.382484

120.81 robot count: 3

155.03

137.41 161.83

first angle mean: 103.0801

first angle stdev: 27.869886

second angle mean: 167.92387

second angle stdev: 16.48882

121.77 155.81

134.85 157.44

first angle mean: 103.17745

first angle stdev: 27.829748

second angle mean: 167.7516

second angle stdev: 16.61724

121.94 154.37

132.51 153.51

first angle mean: 103.27467

first angle stdev: 27.790222

second angle mean: 167.56902

second angle stdev: 16.766148

120.48 145.28

139.55 153.04

first angle mean: 103.363365

first angle stdev: 27.745876

second angle mean: 167.42458

second angle stdev: 16.84282

117.77 136.6

146.64 156.64

first angle mean: 103.43724

first angle stdev: 27.693766

second angle mean: 167.318

second angle stdev: 16.865047

112.61 124.85

155.39 163.38

first angle mean: 103.48404

first angle stdev: 27.630756

second angle mean: 167.25714

second angle stdev: 16.843422

105.47 115.18

163.91 170.26

first angle mean: 103.49411

first angle stdev: 27.560902

second angle mean: 167.24016

second angle stdev: 16.802301

98.34 107.09

169.86 174.28

first angle mean: 103.46808

first angle stdev: 27.493643

second angle mean: 167.25339

second angle stdev: 16.760847

96.43 98.58

174.05 172.2

first angle mean: 103.43271

first angle stdev: 27.428991

second angle mean: 167.28754

second angle stdev: 16.725586

99.39 91.58

179.34 174.54

first angle mean: 103.4125

first angle stdev: 27.361818

second angle mean: 167.3478

second angle stdev: 16.705364

90.99 85.97

177.19 179.95

first angle mean: 103.35071

first angle stdev: 27.307661

second angle mean: 167.39676

second angle stdev: 16.678139

84.88 81.98

177.27 178.34

first angle mean: 103.25926

first angle stdev: 27.270813

second angle mean: 167.44562

second angle stdev: 16.651232

84.89 78.18

178.02 174.94

first angle mean: 103.16878

first angle stdev: 27.233946

second angle mean: 167.49773

second angle stdev: 16.62666

86.04 74.92

178.58 170.54

first angle mean: 103.08481

first angle stdev: 27.19344

second angle mean: 167.55205

second angle stdev: 16.603907

77.43 71.88

178.85 175.17

first angle mean: 102.95966

first angle stdev: 27.185858

second angle mean: 167.60716

second angle stdev: 16.582054

74.34 69.06

178.92 176.65

first angle mean: 102.82073

first angle stdev: 27.192644

second angle mean: 167.66208

second angle stdev: 16.560434

74.8 67.35

178.91 177.93

first angle mean: 102.68537

first angle stdev: 27.19637

second angle mean: 167.71642

second angle stdev: 16.538784

76.46 66.57

178.88 179.29

first angle mean: 102.55929

first angle stdev: 27.191492

second angle mean: 167.7701

second angle stdev: 16.51704

77.91 67.06

178.86 178.35

first angle mean: 102.44135

first angle stdev: 27.17964

second angle mean: 167.82315

second angle stdev: 16.495237

78.79 68.04

178.84 177.36

first angle mean: 102.32872

first angle stdev: 27.16369

second angle mean: 167.8756

second angle stdev: 16.473385

79.94 69.48

178.83 176.47

first angle mean: 102.22262

first angle stdev: 27.142834

second angle mean: 167.92752

second angle stdev: 16.451513

80.35 70.72

178.86 176.74

first angle mean: 102.11944

first angle stdev: 27.120182

second angle mean: 167.97908

second angle stdev: 16.429752

80.12 71.23

178.88 176.86

first angle mean: 102.01616

first angle stdev: 27.098207

second angle mean: 168.03026

second angle stdev: 16.40807

79.96 71.43

178.87 177.41

first angle mean: 101.91309

first angle stdev: 27.076632

second angle mean: 168.08092

second angle stdev: 16.386372

80.9 71.77

178.79 176.92

first angle mean: 101.81535

first angle stdev: 27.0514

second angle mean: 168.13072

second angle stdev: 16.364449

83.23 73.13

178.75 175.22

first angle mean: 101.72931

first angle stdev: 27.01818

second angle mean: 168.1799

second angle stdev: 16.342432

86.02 74.73

178.81 175.11

first angle mean: 101.65691

first angle stdev: 26.976843

second angle mean: 168.2289

second angle stdev: 16.32062

89.77 77.81

178.86 178.98

first angle mean: 101.60239

first angle stdev: 26.92688

second angle mean: 168.27766

second angle stdev: 16.298983

94.81 83.75

178.71 177.07

first angle mean: 101.571365

first angle stdev: 26.869238

second angle mean: 168.3253

second angle stdev: 16.276932

101.12 92.71

178.54 168.66

first angle mean: 101.56932

first angle stdev: 26.80812

second angle mean: 168.37173

second angle stdev: 16.254425

109.9 105.29

178.41 172.34

first angle mean: 101.60701

first angle stdev: 26.75324

second angle mean: 168.41714

second angle stdev: 16.231596

117.63 112.53

178.45 172.28

first angle mean: 101.679184

first angle stdev: 26.714474

second angle mean: 168.46234

second angle stdev: 16.208927

126.28 118.43

178.55 169.04

first angle mean: 101.7895

first angle stdev: 26.70514

second angle mean: 168.50757

second angle stdev: 16.186583

134.74 123.37

178.62 171.1

first angle mean: 101.93661

first angle stdev: 26.73586

second angle mean: 168.55273

second angle stdev: 16.164474

141.19 128.43

178.64 172.02

first angle mean: 102.11107

first angle stdev: 26.803862

second angle mean: 168.59756

second angle stdev: 16.142466

146.85 133.93

178.72 172.22

first angle mean: 102.30903

first angle stdev: 26.908834

second angle mean: 168.64235

second angle stdev: 16.120718

148.27 138.48

172.64 170.65

first angle mean: 102.5115

first angle stdev: 27.021479

second angle mean: 168.65997

second angle stdev: 16.08735

135.83 143.43

159.94 171.38

first angle mean: 102.65763

first angle stdev: 27.051903

second angle mean: 168.6217

second angle stdev: 16.06237

129.7 148.41

149.98 169.47

first angle mean: 102.77573

first angle stdev: 27.051603

second angle mean: 168.54033

second angle stdev: 16.074327

130.07 153.25

146.19 167.61

first angle mean: 102.894394

first angle stdev: 27.052402

second angle mean: 168.44315

second angle stdev: 16.106617

132.17 156.6

145.83 166.06

first angle mean: 103.02112

first angle stdev: 27.062126

second angle mean: 168.34525

second angle stdev: 16.14014

133.81 158.04

146.58 163.11

first angle mean: 103.15383

first angle stdev: 27.078964

second angle mean: 168.25142

second angle stdev: 16.168312

134.68 158.13

143.93 162.02

first angle mean: 103.28914

first angle stdev: 27.099272

second angle mean: 168.14703

second angle stdev: 16.211731

134.09 158.42

144.19 160.04

first angle mean: 103.42076

first angle stdev: 27.115847

second angle mean: 168.04465

second angle stdev: 16.252365

134.75 158.47

146.91 158.48

first angle mean: 103.55408

first angle stdev: 27.134834

second angle mean: 167.95473

second angle stdev: 16.275995

135.52 158.83

145.74 156.32

first angle mean: 103.68953

first angle stdev: 27.15678

second angle mean: 167.8606

second angle stdev: 16.30545

134.24 158.14

144.01 156.42

first angle mean: 103.818436

first angle stdev: 27.171682

second angle mean: 167.75995

second angle stdev: 16.344296

133.21 157.78

144.19 156.49

first angle mean: 103.94193

first angle stdev: 27.18111

second angle mean: 167.6609

second angle stdev: 16.381025

132.99 157.65

145.75 155.64

first angle mean: 104.06346

first angle stdev: 27.188917

second angle mean: 167.56923

second angle stdev: 16.40779

132.64 157.59

145.06 155.01

first angle mean: 104.18254

first angle stdev: 27.194586

second angle mean: 167.47545

second angle stdev: 16.437645

robot count: 4

133.08 154.87

145.62 160.93

first angle mean: 104.30245

first angle stdev: 27.201607

second angle mean: 167.38475

second angle stdev: 16.46356

133.62 150.64

146.91 171.59

first angle mean: 104.4236

first angle stdev: 27.210419

second angle mean: 167.30017

second angle stdev: 16.481926

132.79 147.79

144.27 178.42

first angle mean: 104.54033

first angle stdev: 27.215027

second angle mean: 167.20537

second angle stdev: 16.513924

130.27 151.77

141.9 165.68

first angle mean: 104.64578

first angle stdev: 27.2089

second angle mean: 167.10167

second angle stdev: 16.559156

126.75 148.61

141.94 157.6

first angle mean: 104.736

first angle stdev: 27.189863

second angle mean: 166.99898

second angle stdev: 16.603012

124.14 142.26

143.36 158.13

first angle mean: 104.81488

first angle stdev: 27.162617

second angle mean: 166.90288

second angle stdev: 16.637362

122.01 134.51

145.44 158.01

first angle mean: 104.88449

first angle stdev: 27.129557

second angle mean: 166.81598

second angle stdev: 16.659489

116.58 125.51

147.45 163.18

first angle mean: 104.931656

first angle stdev: 27.084948

second angle mean: 166.7379

second angle stdev: 16.671103

110.77 118.04

147.82 165.97

first angle mean: 104.9551

first angle stdev: 27.033028

second angle mean: 166.66193

second angle stdev: 16.68056

102.1 110.82

149.54 168.94

first angle mean: 104.94369

first angle stdev: 26.979507

second angle mean: 166.59344

second angle stdev: 16.682205

94.68 105.36

153.12 170.95

first angle mean: 104.902794

first angle stdev: 26.933474

second angle mean: 166.53975

second angle stdev: 16.67056

95.69 100.12

158.97 173.58

first angle mean: 104.866234

first angle stdev: 26.886219

second angle mean: 166.50972

second angle stdev: 16.644257

97.18 91.88

164.55 177.44

first angle mean: 104.83585

first angle stdev: 26.837366

second angle mean: 166.50198

second angle stdev: 16.611786

89.05 84.79

163.45 179.61

first angle mean: 104.773705

first angle stdev: 26.802721

second angle mean: 166.48996

second angle stdev: 16.580154

83.68 79.73

165.19 174.16

first angle mean: 104.69099

first angle stdev: 26.782581

second angle mean: 166.48486

second angle stdev: 16.547812

83.43 73.51

174.34 174.68

first angle mean: 104.60793

first angle stdev: 26.7631

second angle mean: 166.51553

second angle stdev: 16.522728

82.69 72.22

178.91 179.63

first angle mean: 104.522644

first angle stdev: 26.745813

second angle mean: 166.56378

second angle stdev: 16.508595

83.2 72.81

177.11 178.82

first angle mean: 104.44

first angle stdev: 26.72679

second angle mean: 166.60464

second angle stdev: 16.489597

82.31 73.8

177.33 176.98

first angle mean: 104.35456

first angle stdev: 26.710424

second angle mean: 166.64606

second angle stdev: 16.471169

80.7 74.46

178.02 171.82

first angle mean: 104.26358

first angle stdev: 26.699186

second angle mean: 166.6898

second angle stdev: 16.45453

78.92 74.27

178.5 171.57

first angle mean: 104.16648

first angle stdev: 26.693947

second angle mean: 166.73505

second angle stdev: 16.439177

78.56 73.96

178.74 175.83

first angle mean: 104.06875

first angle stdev: 26.689703

second angle mean: 166.78088

second angle stdev: 16.424465

79.34 73.71

178.74 173.88

first angle mean: 103.974724

first angle stdev: 26.682354

second angle mean: 166.82634

second angle stdev: 16.409725

80.33 73.58

178.7 174.17

first angle mean: 103.885155

first angle stdev: 26.67135

second angle mean: 166.87134

second angle stdev: 16.39485

81.96 74.24

178.64 173.06

first angle mean: 103.802414

first angle stdev: 26.6549

second angle mean: 166.91573

second angle stdev: 16.379787

83.72 75.5

178.6 173.09

first angle mean: 103.72692

first angle stdev: 26.633121

second angle mean: 166.95966

second angle stdev: 16.364601

85.67 77.75

178.67 175.78

first angle mean: 103.659294

first angle stdev: 26.606073

second angle mean: 167.00351

second angle stdev: 16.34958

88.15 81.37

178.69 176.82

first angle mean: 103.601425

first angle stdev: 26.57322

second angle mean: 167.04712

second angle stdev: 16.334599

92.84 90.11

178.57 179.49

first angle mean: 103.56142

first angle stdev: 26.531864

second angle mean: 167.08997

second angle stdev: 16.31928

98.29 97.64

178.4 177.2

first angle mean: 103.5419

first angle stdev: 26.484621

second angle mean: 167.13185

second angle stdev: 16.303516

105.36 108.66

178.25 178.44

first angle mean: 103.54861

first angle stdev: 26.435942

second angle mean: 167.17288

second angle stdev: 16.287365

114.05 117.32

178.23 179.86

first angle mean: 103.587204

first angle stdev: 26.394955

second angle mean: 167.21352

second angle stdev: 16.271164

122.02 123.32

178.32 177.53

first angle mean: 103.654724

first angle stdev: 26.37009

second angle mean: 167.25421

second angle stdev: 16.25519

132.16 131.15

178.47 173.34

first angle mean: 103.75876

first angle stdev: 26.377993

second angle mean: 167.29515

second angle stdev: 16.23959

140.06 137.72

178.53 171.44

first angle mean: 103.89077

first angle stdev: 26.4205

second angle mean: 167.336

second angle stdev: 16.224136

136.8 142.82

166.48 169.15

first angle mean: 104.01

first angle stdev: 26.446613

second angle mean: 167.33292

second angle stdev: 16.1948

126.52 147.52

155.01 166.45

first angle mean: 104.09126

first angle stdev: 26.43333

second angle mean: 167.2884

second angle stdev: 16.182426

126.91 153.28

153.41 162.46

first angle mean: 104.17334

first angle stdev: 26.42109

second angle mean: 167.2385

second angle stdev: 16.17465

127.76 158.31

147.31 158.87

first angle mean: 104.25788

first angle stdev: 26.411337

second angle mean: 167.16705

second angle stdev: 16.189503

128.06 159.56

143.19 158.4

first angle mean: 104.342896

first angle stdev: 26.402342

second angle mean: 167.08144

second angle stdev: 16.223742

126.91 159.06

138.69 158.51

first angle mean: 104.4232

first angle stdev: 26.389559

second angle mean: 166.9804

second angle stdev: 16.282858

125.25 158.31

139.18 157.78

first angle mean: 104.497055

first angle stdev: 26.371801

second angle mean: 166.88182

second angle stdev: 16.337753

124.65 157.01

142.1 160.63

first angle mean: 104.56827

first angle stdev: 26.352316

second angle mean: 166.79424

second angle stdev: 16.375025

125.13 155.72

136.68 164.7

first angle mean: 104.64066

first angle stdev: 26.33406

second angle mean: 166.6882

second angle stdev: 16.443213

125.58 156.69

131.42 166.4

first angle mean: 104.71414

first angle stdev: 26.316963

second angle mean: 166.56445

second angle stdev: 16.546288

126.13 160.08

130.33 160.19

first angle mean: 104.789024

first angle stdev: 26.30131

second angle mean: 166.43776

second angle stdev: 16.65524

126.68 162.49

132.17 156.04

first angle mean: 104.865295

first angle stdev: 26.287117

second angle mean: 166.31836

second angle stdev: 16.748365

126.33 162.45

133.35 156.18

first angle mean: 104.939835

first angle stdev: 26.271797

second angle mean: 166.20389

second angle stdev: 16.83136

126.65 161.72

134.77 157.13

first angle mean: 105.014946

first angle stdev: 26.257273

second angle mean: 166.09511

second angle stdev: 16.9033

126.27 160.73

134.25 159.42

first angle mean: 105.08824

first angle stdev: 26.24156

second angle mean: 165.9853

second angle stdev: 16.977077

124.85 159.58

132.37 160.51

first angle mean: 105.15616

first angle stdev: 26.221945

second angle mean: 165.8698

second angle stdev: 17.061668

123.45 156.96

128.48 163.23

first angle mean: 105.2188

first angle stdev: 26.198814

second angle mean: 165.74174

second angle stdev: 17.17192

123.46 155.49

127.35 166.02

first angle mean: 105.28107

first angle stdev: 26.175695

second angle mean: 165.6107

second angle stdev: 17.288197

121.92 153.85

123.8 167.33

first angle mean: 105.337654

first angle stdev: 26.149092

second angle mean: 165.46849

second angle stdev: 17.4296

120.78 155.1

124.51 160.29

first angle mean: 105.39

first angle stdev: 26.12016

second angle mean: 165.32967

second angle stdev: 17.562138

119.93 154.08

128.11 151.47

first angle mean: 105.439125

first angle stdev: 26.089647

second angle mean: 165.20392

second angle stdev: 17.664963

119.61 149.34

136.32 147.21

first angle mean: 105.48683

first angle stdev: 26.05862

second angle mean: 165.10666

second angle stdev: 17.714396

117.66 140.67

144.42 150.42

first angle mean: 105.52769

first angle stdev: 26.024385

second angle mean: 165.03725

second angle stdev: 17.725067

115.93 134.17

147.44 153.55

first angle mean: 105.56248

first angle stdev: 25.987768

second angle mean: 164.9784

second angle stdev: 17.724543

112.75 125.54

151.04 158.36

first angle mean: 105.58643

first angle stdev: 25.94773

second angle mean: 164.93193

second angle stdev: 17.713207

109.28 119.01

152.89 162.88

first angle mean: 105.59871

first angle stdev: 25.90546

second angle mean: 164.89192

second angle stdev: 17.69733

104.74 111.98

157.27 166.87

first angle mean: 105.59586

first angle stdev: 25.862583

second angle mean: 164.86668

second angle stdev: 17.67343

100.62 106.99

160.72 168.58

first angle mean: 105.57944

first angle stdev: 25.821447

second angle mean: 164.85301

second angle stdev: 17.645844

96.33 102.38

161.97 173.13

first angle mean: 105.54901

first angle stdev: 25.784384

second angle mean: 164.84352

second angle stdev: 17.61757

96.21 97.03

162.89 171.36

first angle mean: 105.518394

first angle stdev: 25.747614

second angle mean: 164.83711

second angle stdev: 17.589022

98.9 94.25

166.72 177.37

first angle mean: 105.496765

first angle stdev: 25.708282

second angle mean: 164.84326

second angle stdev: 17.560585

95.69 89.65

169.1 178.83

first angle mean: 105.46482

first angle stdev: 25.67246

second angle mean: 164.85713

second angle stdev: 17.53364

90.2 85.84

171.64 178.13

first angle mean: 105.41526

first angle stdev: 25.645456

second angle mean: 164.87917

second angle stdev: 17.509405

88.22 81.81

176.13 178.61

first angle mean: 105.35961

first angle stdev: 25.622547

second angle mean: 164.91557

second angle stdev: 17.492725

84.44 77.13

179.14 178.18

first angle mean: 105.29213

first angle stdev: 25.608675

second angle mean: 164.96144

second angle stdev: 17.483105

82.59 73.34

177.52 175.61

first angle mean: 105.21913

first angle stdev: 25.599752

second angle mean: 165.00183

second angle stdev: 17.469448

82.6 71.02

177.59 177.17

first angle mean: 105.14664

first angle stdev: 25.590652

second angle mean: 165.04218

second angle stdev: 17.455936

82.51 68.99

178.04 175.76

first angle mean: 105.0743

first angle stdev: 25.581656

second angle mean: 165.08371

second angle stdev: 17.443459

79.84 67.45

178.55 174.11

first angle mean: 104.99394

first angle stdev: 25.580431

second angle mean: 165.12659

second angle stdev: 17.432178

77.45 66.75

178.81 174.02

first angle mean: 104.9065

first angle stdev: 25.586752

second angle mean: 165.17004

second angle stdev: 17.4215

77.28 66.73

178.89 174.21

first angle mean: 104.81908

first angle stdev: 25.593315

second angle mean: 165.21344

second angle stdev: 17.410973

78.26 67.13

178.85 173.19

first angle mean: 104.7353

first angle stdev: 25.596283

second angle mean: 165.25647

second angle stdev: 17.400303

79.24 67.9

178.84 171.67

first angle mean: 104.65512

first angle stdev: 25.595839

second angle mean: 165.29918

second angle stdev: 17.38956

79.66 68.49

178.8 171.13

first angle mean: 104.57677

first angle stdev: 25.593857

second angle mean: 165.34149

second angle stdev: 17.37868

robot count: 5

ROBOT: Exercise open\_arms\_above\_head\_ball 79.72 done

68.69

178.79TRAINING: Exercise 171.39open\_arms\_above\_head\_ball

done

first angle mean: 104.4991

first angle stdev: 25.591469

second angle mean: 165.38353

second angle stdev: 17.367731

Directory created or already exists: Patients/55581599/Graphs/open\_arms\_above\_head\_ball/15-07-2024 13-09-46

Directory created or already exists: Patients/55581599/Graphs/open\_arms\_above\_head\_ball/15-07-2024 13-09-46

Directory created or already exists: Patients/55581599/Graphs/open\_arms\_above\_head\_ball/15-07-2024 13-09-46

Directory created or already exists: Patients/55581599/Graphs/open\_arms\_above\_head\_ball/15-07-2024 13-09-46

CAMERA: Exercise open\_arms\_above\_head\_ball done

CAMERA: Exercise hello\_waving start

CAMERA: Exercise hello\_waving done

TRAINING: Exercise arms\_up\_and\_down\_stick start

CAMERA: Exercise arms\_up\_and\_down\_stick start

ROBOT: Exercise arms\_up\_and\_down\_stick start

112.29 120.34

134.58 146.17

first angle mean: 112.29

first angle stdev: 0.0

second angle mean: 134.58

second angle stdev: 0.0

112.8 103.75

130.29 159.9

first angle mean: 112.545

first angle stdev: 0.25500107

second angle mean: 132.435

second angle stdev: 2.1450043

112.56 121.26

133.35 148.35

first angle mean: 112.549995

first angle stdev: 0.20832747

second angle mean: 132.74

second angle stdev: 1.8037227

112.86 128.46

134.74 148.29

first angle mean: 112.6275

first angle stdev: 0.22487555

second angle mean: 133.24

second angle stdev: 1.7860755

113.07 123.87

135.36 149.08

first angle mean: 112.716

first angle stdev: 0.26792553

second angle mean: 133.664

second angle stdev: 1.8086337

112.92 120.44

136.17 148.62

first angle mean: 112.75

first angle stdev: 0.25612485

second angle mean: 134.08167

second angle stdev: 1.8968891

113.13 120.57

136.57 148.54

first angle mean: 112.80428

first angle stdev: 0.2718638

second angle mean: 134.43715

second angle stdev: 1.9601899

112.42 120.7

137.75 148.24

first angle mean: 112.75625

first angle stdev: 0.2842944

second angle mean: 134.85126

second angle stdev: 2.1359878

113.28 121.67

139.19 147.14

first angle mean: 112.81444

first angle stdev: 0.31454033

second angle mean: 135.33333

second angle stdev: 2.432024

116.18 121.73

142.62 144.18

first angle mean: 113.151

first angle stdev: 1.0528387

second angle mean: 136.062

second angle stdev: 3.1783414

118.78 123.49

143.12 142.08

first angle mean: 113.66273

first angle stdev: 1.904297

second angle mean: 136.70363

second angle stdev: 3.646981

120.87 125.17

141.66 144.18

first angle mean: 114.263336

first angle stdev: 2.7003996

second angle mean: 137.11667

second angle stdev: 3.7508178

120.47 124.85

141.67 147.07

first angle mean: 114.74077

first angle stdev: 3.0767784

second angle mean: 137.46693

second angle stdev: 3.8024442

118.21 123.16

141.62 146.58

first angle mean: 114.98857

first angle stdev: 3.096556

second angle mean: 137.76358

second angle stdev: 3.8170445

116.91 123.68

140.77 149.75

first angle mean: 115.11667

first angle stdev: 3.0297084

second angle mean: 137.964

second angle stdev: 3.7630987

117.51 124.42

141.72 150.43

first angle mean: 115.26625

first angle stdev: 2.9901614

second angle mean: 138.19876

second angle stdev: 3.7553253

118.11 124.05

142.57 147.56

first angle mean: 115.43353

first angle stdev: 2.9770522

second angle mean: 138.4559

second angle stdev: 3.7856023

118.51 123.52

141.37 148.78

first angle mean: 115.60444

first angle stdev: 2.9777613

second angle mean: 138.61778

second angle stdev: 3.7390108

118.57 121.68

141.23 146.02

first angle mean: 115.76052

first angle stdev: 2.973026

second angle mean: 138.75526

second angle stdev: 3.6857345

117.58 120.17

142.26 143.62

first angle mean: 115.8515

first angle stdev: 2.9247541

second angle mean: 138.93051

second angle stdev: 3.6727178

117.31 121.02

141.52 145.45

first angle mean: 115.92096

first angle stdev: 2.8711176

second angle mean: 139.05382

second angle stdev: 3.6263807

117.49 121.25

141.17 147.72

first angle mean: 115.99228

first angle stdev: 2.824082

second angle mean: 139.15001

second angle stdev: 3.57032

116.96 120.53

140.62 147.6

first angle mean: 116.03435

first angle stdev: 2.7690482

second angle mean: 139.21391

second angle stdev: 3.5046864

116.45 120.01

141.04 145.9

first angle mean: 116.05167

first angle stdev: 2.7120183

second angle mean: 139.29

second angle stdev: 3.4502454

116.03 118.96

142.96 143.01

first angle mean: 116.050804

first angle stdev: 2.6572275

second angle mean: 139.4368

second angle stdev: 3.4561877

116.52 118.1

144.11 140.74

first angle mean: 116.06885

first angle stdev: 2.607188

second angle mean: 139.61655

second angle stdev: 3.5062015

118.28 118.66

145.37 141.32

first angle mean: 116.15074

first angle stdev: 2.5923052

second angle mean: 139.82962

second angle stdev: 3.6081488

117.92 119.27

143.78 143.54

first angle mean: 116.21393

first angle stdev: 2.5666802

second angle mean: 139.97072

second angle stdev: 3.6181786

117.37 120.34

142.0 146.01

first angle mean: 116.2538

first angle stdev: 2.5308452

second angle mean: 140.04068

second angle stdev: 3.5744786

116.74 121.57

141.97 147.71

first angle mean: 116.270004

first angle stdev: 2.4898372

second angle mean: 140.105

second angle stdev: 3.5314217

116.41 121.97

142.91 146.14

first angle mean: 116.27451

first angle stdev: 2.449474

second angle mean: 140.19548

second angle stdev: 3.5091696

116.35 121.86

143.43 146.21

first angle mean: 116.27687

first angle stdev: 2.4109333

second angle mean: 140.29657

second angle stdev: 3.4994533

116.18 121.71

144.41 146.2

first angle mean: 116.27393

first angle stdev: 2.3741808

second angle mean: 140.42122

second angle stdev: 3.5174248

115.73 120.48

145.21 145.9

first angle mean: 116.257935

first angle stdev: 2.3408108

second angle mean: 140.56207

second angle stdev: 3.5585163

114.66 119.64

145.15 148.6

first angle mean: 116.21228

first angle stdev: 2.3224363

second angle mean: 140.69315

second angle stdev: 3.5896318

114.56 119.98

143.73 150.74

first angle mean: 116.16638

first angle stdev: 2.3059952

second angle mean: 140.77751

second angle stdev: 3.574436

113.63 120.01

143.2 151.55

first angle mean: 116.097824

first angle stdev: 2.3115077

second angle mean: 140.84299

second angle stdev: 3.5476189

112.92 119.52

144.19 151.48

first angle mean: 116.0142

first angle stdev: 2.3369257

second angle mean: 140.93106

second angle stdev: 3.5413907

112.46 119.87

143.6 152.11

first angle mean: 115.923065

first angle stdev: 2.374193

second angle mean: 140.9995

second angle stdev: 3.5210564

111.58 120.01

143.15 153.28

first angle mean: 115.8145

first angle stdev: 2.4404182

second angle mean: 141.05325

second angle stdev: 3.4929385

110.63 118.37

143.67 155.48

first angle mean: 115.68805

first angle stdev: 2.539681

second angle mean: 141.11707

second angle stdev: 3.4736116

109.75 115.46

144.3 156.08

first angle mean: 115.54667

first angle stdev: 2.6675746

second angle mean: 141.19284

second angle stdev: 3.4661455

107.06 110.17

145.38 155.34

first angle mean: 115.349304

first angle stdev: 2.9302695

second angle mean: 141.29022

second angle stdev: 3.483247

103.02 104.39

147.5 156.37

first angle mean: 115.06909

first angle stdev: 3.4303975

second angle mean: 141.43135

second angle stdev: 3.5656319

101.3 99.57

152.63 155.72

first angle mean: 114.76311

first angle stdev: 3.9529183

second angle mean: 141.6802

second angle stdev: 3.8930905

101.17 97.17

156.5 155.12

first angle mean: 114.467606

first angle stdev: 4.3835316

second angle mean: 142.00238

second angle stdev: 4.4155803

100.94 95.84

158.12 154.29

first angle mean: 114.17978

first angle stdev: 4.7557554

second angle mean: 142.3453

second angle stdev: 4.9489484

101.88 96.1

157.65 155.8

first angle mean: 113.923546

first angle stdev: 5.0231586

second angle mean: 142.66417

second angle stdev: 5.362838

102.16 98.3

156.83 157.79

first angle mean: 113.68347

first angle stdev: 5.2424846

second angle mean: 142.95326

second angle stdev: 5.6731687

102.0 101.49

154.25 158.27

first angle mean: 113.44981

first angle stdev: 5.4414554

second angle mean: 143.1792

second angle stdev: 5.834588

104.44 105.17

154.11 160.41

first angle mean: 113.27314

first angle stdev: 5.5307636

second angle mean: 143.39352

second angle stdev: 5.972585

106.61 111.04

154.61 166.76

first angle mean: 113.145004

first angle stdev: 5.5532393

second angle mean: 143.60922

second angle stdev: 6.1121736

110.37 113.87

159.33 169.31

first angle mean: 113.09264

first angle stdev: 5.513543

second angle mean: 143.90584

second angle stdev: 6.420971

115.81 116.3

163.06 167.5

first angle mean: 113.14297

first angle stdev: 5.474525

second angle mean: 144.26056

second angle stdev: 6.865395

120.5 117.52

162.2 159.81

first angle mean: 113.27673

first angle stdev: 5.512869

second angle mean: 144.58673

second angle stdev: 7.2126017

122.62 118.82

158.73 152.14

first angle mean: 113.443565

first angle stdev: 5.60179

second angle mean: 144.83928

second angle stdev: 7.389241

122.44 119.3

158.3 150.26

first angle mean: 113.6014

first angle stdev: 5.676666

second angle mean: 145.07544

second angle stdev: 7.5343213

121.32 119.05

158.12 149.28

first angle mean: 113.734474

first angle stdev: 5.716504

second angle mean: 145.30034

second angle stdev: 7.659666

119.58 119.44

156.16 147.05

first angle mean: 113.83356

first angle stdev: 5.7178564

second angle mean: 145.4844

second angle stdev: 7.7227616

118.81 119.9

154.14 144.76

first angle mean: 113.9165

first angle stdev: 5.705686

second angle mean: 145.62866

second angle stdev: 7.7378855

118.17 119.38

153.14 143.49

first angle mean: 113.98622

first angle stdev: 5.684444

second angle mean: 145.7518

second angle stdev: 7.7332444

119.12 121.43

149.88 144.98

first angle mean: 114.06903

first angle stdev: 5.6753817

second angle mean: 145.81837

second angle stdev: 7.6882343

118.84 122.62

146.3 146.1

first angle mean: 114.14475

first angle stdev: 5.6616483

second angle mean: 145.82602

second angle stdev: 7.62721

119.05 124.66

146.57 147.21

first angle mean: 114.221405

first angle stdev: 5.6500883

second angle mean: 145.83766

second angle stdev: 7.5679502

117.97 125.29

147.03 147.45

first angle mean: 114.279076

first angle stdev: 5.6254086

second angle mean: 145.856

second angle stdev: 7.5109434

117.53 126.73

145.9 148.37

first angle mean: 114.32833

first angle stdev: 5.596736

second angle mean: 145.85669

second angle stdev: 7.4538274

116.6 128.22

142.58 149.58

first angle mean: 114.362236

first angle stdev: 5.5616374

second angle mean: 145.80779

second angle stdev: 7.4086537

116.17 129.34

140.62 150.56

first angle mean: 114.388824

first angle stdev: 5.5248785

second angle mean: 145.73149

second angle stdev: 7.380442

robot count: 1

116.35 129.44

141.27 150.25

first angle mean: 114.417244

first angle stdev: 5.489703

second angle mean: 145.66682

second angle stdev: 7.346141

117.15 128.07

143.91 150.36

first angle mean: 114.45628

first angle stdev: 5.459988

second angle mean: 145.64172

second angle stdev: 7.2964582

118.56 126.97

150.12 151.41

first angle mean: 114.514084

first angle stdev: 5.4429255

second angle mean: 145.7048

second angle stdev: 7.2640867

120.29 126.63

154.16 153.29

first angle mean: 114.59431

first angle stdev: 5.447099

second angle mean: 145.82222

second angle stdev: 7.281018

121.09 126.9

152.69 157.17

first angle mean: 114.68329

first angle stdev: 5.4620986

second angle mean: 145.9163

second angle stdev: 7.274907

121.11 127.05

152.64 157.47

first angle mean: 114.77014

first angle stdev: 5.475578

second angle mean: 146.00717

second angle stdev: 7.267169

120.83 126.34

153.88 155.5

first angle mean: 114.85094

first angle stdev: 5.4831824

second angle mean: 146.11214

second angle stdev: 7.2748194

120.79 125.3

154.98 154.23

first angle mean: 114.929085

first angle stdev: 5.4888706

second angle mean: 146.22882

second angle stdev: 7.2971053

120.1 125.05

153.51 152.66

first angle mean: 114.99623

first angle stdev: 5.484449

second angle mean: 146.32338

second angle stdev: 7.296286

119.38 124.68

153.28 151.66

first angle mean: 115.05244

first angle stdev: 5.47145

second angle mean: 146.41257

second angle stdev: 7.2914863

119.25 123.98

153.54 151.86

first angle mean: 115.10557

first angle stdev: 5.4569244

second angle mean: 146.50279

second angle stdev: 7.2888737

119.18 124.34

152.73 153.52

first angle mean: 115.156494

first angle stdev: 5.441573

second angle mean: 146.58064

second angle stdev: 7.2761426

118.71 124.59

152.27 153.85

first angle mean: 115.20036

first angle stdev: 5.422096

second angle mean: 146.65088

second angle stdev: 7.2583284

118.11 124.34

152.08 153.22

first angle mean: 115.235855

first angle stdev: 5.398387

second angle mean: 146.71709

second angle stdev: 7.238503

117.49 122.53

151.29 152.99

first angle mean: 115.263016

first angle stdev: 5.3714004

second angle mean: 146.77217

second angle stdev: 7.2120423

113.53 119.42

149.98 151.46

first angle mean: 115.242386

first angle stdev: 5.34264

second angle mean: 146.81038

second angle stdev: 7.177423

106.56 113.72

146.14 149.53

first angle mean: 115.140236

first angle stdev: 5.3929977

second angle mean: 146.80247

second angle stdev: 7.1354437

99.35 106.14

145.67 148.19

first angle mean: 114.95662

first angle stdev: 5.6224303

second angle mean: 146.7893

second angle stdev: 7.094876

95.49 97.08

152.87 146.13

first angle mean: 114.73287

first angle stdev: 5.962722

second angle mean: 146.8592

second angle stdev: 7.0836987

92.34 88.53

161.85 146.05

first angle mean: 114.4784

first angle stdev: 6.3861933

second angle mean: 147.02954

second angle stdev: 7.220335

87.51 81.28

168.38 151.07

first angle mean: 114.175385

first angle stdev: 6.957389

second angle mean: 147.26944

second angle stdev: 7.524078

80.52 71.22

168.3 148.07

first angle mean: 113.80143

first angle stdev: 7.7661433

second angle mean: 147.5031

second angle stdev: 7.800154

70.77 59.35

163.88 140.45

first angle mean: 113.32855

first angle stdev: 8.931685

second angle mean: 147.68307

second angle stdev: 7.942839

60.88 49.11

164.04 141.84

first angle mean: 112.75846

first angle stdev: 10.41554

second angle mean: 147.86086

second angle stdev: 8.079572

52.21 45.62

165.04 153.72

first angle mean: 112.1074

first angle stdev: 12.096021

second angle mean: 148.04558

second angle stdev: 8.229021

44.35 42.18

165.61 178.97

first angle mean: 111.38657

first angle stdev: 13.895278

second angle mean: 148.23244

second angle stdev: 8.381139

41.17 35.72

168.59 175.89

first angle mean: 110.64745

first angle stdev: 15.569158

second angle mean: 148.44673

second angle stdev: 8.59189

36.42 31.27

172.17 177.49

first angle mean: 109.87427

first angle stdev: 17.224073

second angle mean: 148.69386

second angle stdev: 8.87992

32.27 26.95

172.15 168.7

first angle mean: 109.07422

first angle stdev: 18.842958

second angle mean: 148.93568

second angle stdev: 9.146237

28.51 23.07

170.94 174.82

first angle mean: 108.25214

first angle stdev: 20.420303

second angle mean: 149.16022

second angle stdev: 9.364313

26.38 21.56

173.29 179.77

first angle mean: 107.42514

first angle stdev: 21.904346

second angle mean: 149.40395

second angle stdev: 9.624264

26.14 21.94

178.49 178.26

first angle mean: 106.61228

first angle stdev: 23.246815

second angle mean: 149.69481

second angle stdev: 10.003778

26.94 22.59

178.88 178.25

first angle mean: 105.823456

first angle stdev: 24.439512

second angle mean: 149.98378

second angle stdev: 10.365069

28.27 22.35

179.15 178.82

first angle mean: 105.063126

first angle stdev: 25.491608

second angle mean: 150.26973

second angle stdev: 10.706984

29.92 22.81

179.63 178.82

first angle mean: 104.33358

first angle stdev: 26.415926

second angle mean: 150.55478

second angle stdev: 11.036959

30.87 22.78

178.14 178.97

first angle mean: 103.627205

first angle stdev: 27.248592

second angle mean: 150.82

second angle stdev: 11.308828

32.43 23.45

176.37 178.91

first angle mean: 102.949135

first angle stdev: 27.986269

second angle mean: 151.06334

second angle stdev: 11.52517

36.92 25.63

174.84 177.88

first angle mean: 102.32622

first angle stdev: 28.57595

second angle mean: 151.28766

second angle stdev: 11.698694

42.75 35.15

170.65 174.37

first angle mean: 101.76943

first angle stdev: 29.014044

second angle mean: 151.46861

second angle stdev: 11.792005

50.91 46.92

168.87 178.54

first angle mean: 101.298515

first angle stdev: 29.287352

second angle mean: 151.62975

second angle stdev: 11.855027

60.19 58.41

168.14 179.58

first angle mean: 100.92137

first angle stdev: 29.414984

second angle mean: 151.78122

second angle stdev: 11.905047

71.9 64.03

168.06 164.52

first angle mean: 100.65755

first angle stdev: 29.410248

second angle mean: 151.92921

second angle stdev: 11.951105

81.3 69.87

165.08 141.42

first angle mean: 100.483154

first angle stdev: 29.334545

second angle mean: 152.04768

second angle stdev: 11.9618635

86.07 79.17

165.47 152.56

first angle mean: 100.35447

first angle stdev: 29.234749

second angle mean: 152.16751

second angle stdev: 11.975092

91.47 87.69

168.21 166.98

first angle mean: 100.27584

first angle stdev: 29.116995

second angle mean: 152.3095

second angle stdev: 12.016287

94.49 92.26

169.68 169.04

first angle mean: 100.22509

first angle stdev: 28.994028

second angle mean: 152.46187

second angle stdev: 12.07262

97.13 95.05

167.96 165.35

first angle mean: 100.19817

first angle stdev: 28.869123

second angle mean: 152.59663

second angle stdev: 12.105836

100.77 99.09

165.75 163.15

first angle mean: 100.2031

first angle stdev: 28.744467

second angle mean: 152.71002

second angle stdev: 12.114723

102.59 101.7

161.57 163.68

first angle mean: 100.223495

first angle stdev: 28.622206

second angle mean: 152.78575

second angle stdev: 12.090381

104.68 105.28

157.15 163.67

first angle mean: 100.26126

first angle stdev: 28.503595

second angle mean: 152.82274

second angle stdev: 12.045685

106.4 109.64

153.77 164.16

first angle mean: 100.31285

first angle stdev: 28.38911

second angle mean: 152.8307

second angle stdev: 11.995279

108.28 113.42

151.95 164.54

first angle mean: 100.37925

first angle stdev: 28.279852

second angle mean: 152.82333

second angle stdev: 11.945462

110.25 115.44

153.94 163.34

first angle mean: 100.46082

first angle stdev: 28.176924

second angle mean: 152.83257

second angle stdev: 11.896428

113.68 117.52

154.18 160.78

first angle mean: 100.569176

first angle stdev: 28.086508

second angle mean: 152.84361

second angle stdev: 11.848193

117.04robot count: 2

119.38

154.06 157.2

first angle mean: 100.70309

first angle stdev: 28.011179

second angle mean: 152.8535

second angle stdev: 11.800437

counter:1

118.84 121.87

149.01 154.82

first angle mean: 100.84935

first angle stdev: 27.945126

second angle mean: 152.8225

second angle stdev: 11.757787

118.91 123.6

147.15 153.47

first angle mean: 100.993835

first angle stdev: 27.879583

second angle mean: 152.77713

second angle stdev: 11.721559

119.2 124.92

141.78 150.14

first angle mean: 101.13833

first angle stdev: 27.815681

second angle mean: 152.68983

second angle stdev: 11.71566

120.61 125.63

139.32 144.39

first angle mean: 101.29166

first angle stdev: 27.759354

second angle mean: 152.58456

second angle stdev: 11.729124

122.32 126.51

139.4 140.61

first angle mean: 101.45593

first angle stdev: 27.71262

second angle mean: 152.48157

second angle stdev: 11.740743

122.46 127.58

139.37 142.99

first angle mean: 101.61876

first angle stdev: 27.666391

second angle mean: 152.37991

second angle stdev: 11.751543

121.93 128.8

139.88 146.96

first angle mean: 101.775

first angle stdev: 27.61685

second angle mean: 152.28377

second angle stdev: 11.757089

119.42 127.72

142.02 147.92

first angle mean: 101.90969

first angle stdev: 27.554071

second angle mean: 152.20541

second angle stdev: 11.746148

114.51 123.43

141.72 147.1

first angle mean: 102.00515

first angle stdev: 27.471237

second angle mean: 152.12598

second angle stdev: 11.736836

110.23 118.74

142.85 146.48

first angle mean: 102.06699

first angle stdev: 27.376986

second angle mean: 152.05623

second angle stdev: 11.720055

106.72 114.11

144.93 147.22

first angle mean: 102.101715

first angle stdev: 27.277584

second angle mean: 152.00305

second angle stdev: 11.692338

105.59 110.38

145.81 149.92

first angle mean: 102.127556

first angle stdev: 27.178013

second angle mean: 151.95717

second angle stdev: 11.661049

103.95 107.19

144.79 152.63

first angle mean: 102.14095

first angle stdev: 27.078356

second angle mean: 151.9045

second angle stdev: 11.634224

100.29 104.53

143.49 154.61

first angle mean: 102.12744

first angle stdev: 26.979809

second angle mean: 151.84306

second angle stdev: 11.613794

94.36 99.35

145.03 153.81

first angle mean: 102.07116

first angle stdev: 26.889952

second angle mean: 151.7937

second angle stdev: 11.586059

89.42 93.57

151.65 153.1

first angle mean: 101.98015

first angle stdev: 26.814375

second angle mean: 151.79268

second angle stdev: 11.544313

84.94 88.19

158.1 159.33

first angle mean: 101.85843

first angle stdev: 26.756945

second angle mean: 151.83772

second angle stdev: 11.515265

81.02 82.09

161.92 161.18

first angle mean: 101.71063

first angle stdev: 26.71918

second angle mean: 151.90923

second angle stdev: 11.505509

73.11 71.44

161.32 154.08

first angle mean: 101.509224

first angle stdev: 26.73213

second angle mean: 151.97551

second angle stdev: 11.491902

65.1 60.97

160.78 151.29

first angle mean: 101.254616

first angle stdev: 26.810722

second angle mean: 152.03706

second angle stdev: 11.475128

56.99 53.84

161.55 155.32

first angle mean: 100.94723

first angle stdev: 26.969154

second angle mean: 152.10313

second angle stdev: 11.462471

50.98 50.23

162.36 162.98

first angle mean: 100.60262

first angle stdev: 27.192265

second angle mean: 152.17387

second angle stdev: 11.454372

44.48 43.73

163.05 178.87

first angle mean: 100.218216

first angle stdev: 27.491463

second angle mean: 152.24837

second angle stdev: 11.450269

41.54 38.37

165.46 176.87

first angle mean: 99.81905

first angle stdev: 27.819103

second angle mean: 152.33824

second angle stdev: 11.462812

37.15 33.39

167.88 179.18

first angle mean: 99.39561

first angle stdev: 28.19629

second angle mean: 152.44325

second angle stdev: 11.494751

33.41 28.04

168.91 178.93

first angle mean: 98.95275

first angle stdev: 28.6133

second angle mean: 152.55377

second angle stdev: 11.534737

29.13 25.11

168.54 179.13

first angle mean: 98.48727

first angle stdev: 29.0783

second angle mean: 152.66034

second angle stdev: 11.569594

28.24 23.99

168.44 179.56

first angle mean: 98.02206

first angle stdev: 29.536613

second angle mean: 152.76485

second angle stdev: 11.602032

30.18 22.79

170.96 178.4

first angle mean: 97.57572

first angle stdev: 29.94583

second angle mean: 152.88454

second angle stdev: 11.656984

31.51 23.29

178.43 179.89

first angle mean: 97.14392

first angle stdev: 30.318846

second angle mean: 153.0515

second angle stdev: 11.799765

32.39 24.61

178.5 179.25

first angle mean: 96.72344

first angle stdev: 30.664545

second angle mean: 153.21675

second angle stdev: 11.937687

32.73 25.27

178.15 179.01

first angle mean: 96.31058

first angle stdev: 30.991898

second angle mean: 153.37762

second angle stdev: 12.065398

32.8 25.24

178.48 179.25

first angle mean: 95.90346

first angle stdev: 31.30545

second angle mean: 153.53854

second angle stdev: 12.192377

32.16 24.9

179.08 179.5

first angle mean: 95.49745

first angle stdev: 31.61494

second angle mean: 153.7012

second angle stdev: 12.322174

32.2 24.87

179.41 180.0

first angle mean: 95.09683

first angle stdev: 31.912006

second angle mean: 153.86392

second angle stdev: 12.451172

33.0 24.8

179.31 179.46

first angle mean: 94.70629

first angle stdev: 32.18805

second angle mean: 154.02397

second angle stdev: 12.573916

33.9 25.81

175.6 179.14

first angle mean: 94.32625

first angle stdev: 32.443172

second angle mean: 154.15883

second angle stdev: 12.64937

37.07 27.82

174.29 178.14

first angle mean: 93.97062

first angle stdev: 32.653595

second angle mean: 154.28387

second angle stdev: 12.708826

43.28 37.11

170.45 175.13

first angle mean: 93.65771

first angle stdev: 32.79388

second angle mean: 154.38365

second angle stdev: 12.732657

52.09 52.3

170.19 177.77

first angle mean: 93.402695

first angle stdev: 32.853863

second angle mean: 154.48064

second angle stdev: 12.753405

60.73 62.13

169.46 179.84

first angle mean: 93.20347

first angle stdev: 32.85216

second angle mean: 154.57196

second angle stdev: 12.767827

72.7 74.17

164.78 176.58

first angle mean: 93.0792

first angle stdev: 32.791092

second angle mean: 154.63383

second angle stdev: 12.753711

81.79 83.51

160.52 170.59

first angle mean: 93.0112

first angle stdev: 32.703846

second angle mean: 154.66928

second angle stdev: 12.7233925

88.84 91.34

160.37 170.5

first angle mean: 92.98622

first angle stdev: 32.60737

second angle mean: 154.70343

second angle stdev: 12.692863

92.43 96.93

160.14 172.78

first angle mean: 92.98291

first angle stdev: 32.510204

second angle mean: 154.73578

second angle stdev: 12.661939

96.89 101.97

155.28 170.2

first angle mean: 93.006035

first angle stdev: 32.415264

second angle mean: 154.739

second angle stdev: 12.624491

103.17 106.29

152.78 164.98

first angle mean: 93.06582

first angle stdev: 32.329132

second angle mean: 154.72748

second angle stdev: 12.588197

108.05 112.4

149.74 164.45

first angle mean: 93.15344

first angle stdev: 32.254704

second angle mean: 154.69832

second angle stdev: 12.557095

113.08 117.44

151.14 164.17

first angle mean: 93.269295

first angle stdev: 32.196465

second angle mean: 154.67763

second angle stdev: 12.523461

116.39 120.87

150.6 160.52

first angle mean: 93.40294

first angle stdev: 32.15109

second angle mean: 154.65405

second angle stdev: 12.491039

counter:2

robot count: 3117.3

126.79

140.68 156.31

first angle mean: 93.54028

first angle stdev: 32.10942

second angle mean: 154.57375

second angle stdev: 12.499807

116.92 128.59

135.31 149.78

first angle mean: 93.67388

first angle stdev: 32.06601

second angle mean: 154.46365

second angle stdev: 12.548337

117.86 130.09

130.41 144.76

first angle mean: 93.8113

first angle stdev: 32.02642

second angle mean: 154.32698

second angle stdev: 12.642578

120.12 131.31

130.91 141.21

first angle mean: 93.959946

first angle stdev: 31.996641

second angle mean: 154.19469

second angle stdev: 12.728405

121.98 132.14

131.54 138.14

first angle mean: 94.117355

first angle stdev: 31.975296

second angle mean: 154.06741

second angle stdev: 12.805048

122.6 132.17

130.12 134.12

first angle mean: 94.276474

first angle stdev: 31.956448

second angle mean: 153.93362

second angle stdev: 12.893375

123.5 132.18

130.1 131.24

first angle mean: 94.43883

first angle stdev: 31.941494

second angle mean: 153.80121

second angle stdev: 12.978977

124.01 129.53

131.85 129.69

first angle mean: 94.60221

first angle stdev: 31.928469

second angle mean: 153.67993

second angle stdev: 13.044947

122.98 125.99

133.83 130.05

first angle mean: 94.758125

first angle stdev: 31.909657

second angle mean: 153.57088

second angle stdev: 13.09155

119.5 122.59

134.35 134.57

first angle mean: 94.893326

first angle stdev: 31.87458

second angle mean: 153.46584

second angle stdev: 13.132399

115.95 120.77

135.33 140.93

first angle mean: 95.00777

first angle stdev: 31.825523

second angle mean: 153.36728

second angle stdev: 13.164363

112.44 119.03

138.14 145.55

first angle mean: 95.102

first angle stdev: 31.76512

second angle mean: 153.28497

second angle stdev: 13.176126

108.75 116.96

138.22 149.56

first angle mean: 95.17537

first angle stdev: 31.695328

second angle mean: 153.20398

second angle stdev: 13.186755

105.77 112.62

140.97 148.52

first angle mean: 95.23203

first angle stdev: 31.61991

second angle mean: 153.13855

second angle stdev: 13.181681

100.95 108.62

138.48 150.46

first angle mean: 95.26244

first angle stdev: 31.538445

second angle mean: 153.0606

second angle stdev: 13.189743

96.9 105.05

137.26 150.03

first angle mean: 95.27111

first angle stdev: 31.455126

second angle mean: 152.97697

second angle stdev: 13.204651

89.28 96.68

140.95 148.97

first angle mean: 95.23958

first angle stdev: 31.37523

second angle mean: 152.91368

second angle stdev: 13.198577

83.81 91.5

146.03 152.88

first angle mean: 95.17974

first angle stdev: 31.303862

second angle mean: 152.87764

second angle stdev: 13.17335

78.18 84.44

153.09 158.45

first angle mean: 95.091194

first angle stdev: 31.246202

second angle mean: 152.87874

second angle stdev: 13.1390085

71.22 73.54

155.77 156.23

first angle mean: 94.967514

first angle stdev: 31.212236

second angle mean: 152.89372

second angle stdev: 13.106569

63.49 63.84

158.03 153.81

first angle mean: 94.80526

first angle stdev: 31.213188

second angle mean: 152.9202

second angle stdev: 13.07792

55.81 56.88

159.11 156.63

first angle mean: 94.605286

first angle stdev: 31.257399

second angle mean: 152.95195

second angle stdev: 13.051833

49.38 52.86

160.57 169.79

first angle mean: 94.37454

first angle stdev: 31.343616

second angle mean: 152.99081

second angle stdev: 13.029804

44.5 48.85

159.5 177.68

first angle mean: 94.12137

first angle stdev: 31.464235

second angle mean: 153.02385

second angle stdev: 13.004922

39.27 40.94

161.17 172.07

first angle mean: 93.844345

first angle stdev: 31.62462

second angle mean: 153.065

second angle stdev: 12.984885

35.58 33.29

165.5 167.27

first angle mean: 93.55156

first angle stdev: 31.812956

second angle mean: 153.12749

second angle stdev: 12.98203

32.41 27.89

167.7 164.19

first angle mean: 93.24585

first angle stdev: 32.02502

second angle mean: 153.20035

second angle stdev: 12.990263

29.88 25.23

168.88 167.93

first angle mean: 92.9306

first angle stdev: 32.254864

second angle mean: 153.27835

second angle stdev: 13.004786

29.17 24.36

170.33 175.49

first angle mean: 92.614944

first angle stdev: 32.484642

second angle mean: 153.36278

second angle stdev: 13.027643

30.03 24.83

170.96 179.1

first angle mean: 92.30665

first angle stdev: 32.699444

second angle mean: 153.44946

second angle stdev: 13.053785

31.71 24.71

171.53 177.56

first angle mean: 92.00961

first angle stdev: 32.89261

second angle mean: 153.53809

second angle stdev: 13.082838

32.4 24.42

172.64 178.11

first angle mean: 91.71883

first angle stdev: 33.07408

second angle mean: 153.63127

second angle stdev: 13.118573

32.42 23.97

172.03 179.13

first angle mean: 91.43098

first angle stdev: 33.250134

second angle mean: 153.7206

second angle stdev: 13.149024

32.24 24.37

170.59 179.91

first angle mean: 91.14502

first angle stdev: 33.42266

second angle mean: 153.80208

second angle stdev: 13.169271

31.93 24.75

168.07 176.45

first angle mean: 90.86034

first angle stdev: 33.59286

second angle mean: 153.87068

second angle stdev: 13.174594

32.68 25.48

167.38 171.79

first angle mean: 90.581955

first angle stdev: 33.75203

second angle mean: 153.93532

second angle stdev: 13.176057

34.92 27.69

166.13 176.72

first angle mean: 90.3169

first angle stdev: 33.888905

second angle mean: 153.9934

second angle stdev: 13.17143

38.3 30.95

166.28 179.58

first angle mean: 90.07037

first angle stdev: 33.99673

second angle mean: 154.05162

second angle stdev: 13.167248

43.21 39.16

161.39 178.67

first angle mean: 89.849335

first angle stdev: 34.068096

second angle mean: 154.08624

second angle stdev: 13.145776

48.71 53.13

159.83 179.96

first angle mean: 89.6562

first angle stdev: 34.104168

second angle mean: 154.1132

second angle stdev: 13.120756

57.81 62.53

161.65 179.01

first angle mean: 89.50738

first angle stdev: 34.093643

second angle mean: 154.14844

second angle stdev: 13.100151

65.93 68.82

160.74 174.55

first angle mean: 89.39771

first angle stdev: 34.05207

second angle mean: 154.1791

second angle stdev: 13.077345

75.2 76.26

154.07 162.67

first angle mean: 89.33199

first angle stdev: 33.986824

second angle mean: 154.17857

second angle stdev: 13.047039

82.62 86.2

154.05 165.55

first angle mean: 89.30106

first angle stdev: 33.911472

second angle mean: 154.17798

second angle stdev: 13.016946

90.32 95.09

158.78 170.59

first angle mean: 89.30573

first angle stdev: 33.83367

second angle mean: 154.19908

second angle stdev: 12.990777

95.97 100.84

157.11 169.91

first angle mean: 89.33617

first angle stdev: 33.759327

second angle mean: 154.21237

second angle stdev: 12.96257

99.86 104.85

153.17 166.3

first angle mean: 89.384

first angle stdev: 33.689953

second angle mean: 154.20764

second angle stdev: 12.933267

103.29 107.86

150.15 164.6

first angle mean: 89.44692

first angle stdev: 33.626602

second angle mean: 154.18927

second angle stdev: 12.906846

105.97 110.91

148.59 163.28

first angle mean: 89.521355

first angle stdev: 33.56902

second angle mean: 154.16406

second angle stdev: 12.883202

110.5 115.18

148.58 161.06

first angle mean: 89.615425

first angle stdev: 33.522984

second angle mean: 154.139

second angle stdev: 12.859696

114.81 120.79

148.05 158.93

first angle mean: 89.727905

first angle stdev: 33.490215

second angle mean: 154.11185

second angle stdev: 12.837379

117.0 125.96

143.01 159.14

first angle mean: 89.84911

first angle stdev: 33.464916

second angle mean: 154.0625

second angle stdev: 12.8300905

robot count: 4

counter:3

115.02 127.24

136.61 148.1

first angle mean: 89.96049

first angle stdev: 33.432568

second angle mean: 153.98528

second angle stdev: 12.853973

115.31 125.83

133.25 143.16

first angle mean: 90.07215

first angle stdev: 33.401062

second angle mean: 153.89394

second angle stdev: 12.898932

117.22 125.34

133.5 138.95

first angle mean: 90.191216

first angle stdev: 33.37598

second angle mean: 153.80449

second angle stdev: 12.940977

119.52 126.6

132.01 136.07

first angle mean: 90.31929

first angle stdev: 33.359127

second angle mean: 153.7093

second angle stdev: 12.992412

120.92 127.52

132.84 136.53

first angle mean: 90.45235

first angle stdev: 33.347363

second angle mean: 153.61858

second angle stdev: 13.036649

121.19 126.97

133.73 139.98

first angle mean: 90.5854

first angle stdev: 33.336243

second angle mean: 153.53247

second angle stdev: 13.073769

118.31 123.43

136.73 143.04

first angle mean: 90.70491

first angle stdev: 33.313866

second angle mean: 153.46007

second angle stdev: 13.091919

111.73 117.51

136.73 143.2

first angle mean: 90.79515

first angle stdev: 33.270702

second angle mean: 153.38824

second angle stdev: 13.109495

104.21 111.06

135.17 143.29

first angle mean: 90.85248

first angle stdev: 33.211063

second angle mean: 153.3104

second angle stdev: 13.135324

96.18 103.04

136.42 144.75

first angle mean: 90.87515

first angle stdev: 33.142143

second angle mean: 153.23853

second angle stdev: 13.153378

90.01 92.95

141.03 146.27

first angle mean: 90.87148

first angle stdev: 33.0719

second angle mean: 153.18678

second angle stdev: 13.149416

84.54 85.88

146.51 149.76

first angle mean: 90.84477

first angle stdev: 33.004604

second angle mean: 153.15863

second angle stdev: 13.12878

75.0 73.23

154.4 150.44

first angle mean: 90.7782

first angle stdev: 32.951138

second angle mean: 153.16383

second angle stdev: 13.101416

64.47 59.14

154.6 145.76

first angle mean: 90.66811

first angle stdev: 32.925953

second angle mean: 153.16985

second angle stdev: 13.0743065

57.42 52.8

156.22 149.21

first angle mean: 90.52958

first angle stdev: 32.92701

second angle mean: 153.18256

second angle stdev: 13.04852

53.53 52.37

162.29 170.03

first angle mean: 90.37605

first angle stdev: 32.94459

second angle mean: 153.22034

second angle stdev: 13.034574

49.23 46.95

166.57 178.6

first angle mean: 90.20603

first angle stdev: 32.98224

second angle mean: 153.2755

second angle stdev: 13.035775

40.24 36.1

168.34 178.73

first angle mean: 90.00042

first angle stdev: 33.06937

second angle mean: 153.33748

second angle stdev: 13.044623

34.11 29.96

168.19 174.46

first angle mean: 89.771355

first angle stdev: 33.19414

second angle mean: 153.39836

second angle stdev: 13.052401

29.53 25.95

167.5 169.36

first angle mean: 89.525475

first angle stdev: 33.348248

second angle mean: 153.45592

second angle stdev: 13.056728

28.62 23.71

168.09 168.37

first angle mean: 89.27789

first angle stdev: 33.505264

second angle mean: 153.5154

second angle stdev: 13.063392

29.61 22.67

170.33 171.6

first angle mean: 89.03632

first angle stdev: 33.651352

second angle mean: 153.58347

second angle stdev: 13.080569

30.84 25.27

173.37 178.78

first angle mean: 88.80165

first angle stdev: 33.78533

second angle mean: 153.66327

second angle stdev: 13.114254

31.15 26.48

175.52 178.71

first angle mean: 88.570114

first angle stdev: 33.913998

second angle mean: 153.75104

second angle stdev: 13.160692

32.12 25.67

176.69 178.7

first angle mean: 88.34432

first angle stdev: 34.03313

second angle mean: 153.8428

second angle stdev: 13.213907

33.35 25.54

175.08 173.58

first angle mean: 88.12522

first angle stdev: 34.141483

second angle mean: 153.92741

second angle stdev: 13.255242

34.11 26.72

170.64 174.32

first angle mean: 87.910866

first angle stdev: 34.242477

second angle mean: 153.99374

second angle stdev: 13.270576

36.59 29.16

168.24 174.15

first angle mean: 87.70802

first angle stdev: 34.32611

second angle mean: 154.05003

second angle stdev: 13.274454

41.07 33.49

167.35 172.67

first angle mean: 87.52441

first angle stdev: 34.382736

second angle mean: 154.10239

second angle stdev: 13.274451

45.21 40.4

165.98 174.09

first angle mean: 87.358475

first angle stdev: 34.41701

second angle mean: 154.14899

second angle stdev: 13.269179

48.78 46.03

165.99 179.37

first angle mean: 87.20777

first angle stdev: 34.433918

second angle mean: 154.19524

second angle stdev: 13.263819

51.71 51.25

166.24 178.66

first angle mean: 87.06964

first angle stdev: 34.437843

second angle mean: 154.2421

second angle stdev: 13.259211

58.88 58.59

167.36 178.07

first angle mean: 86.96039

first angle stdev: 34.41564

second angle mean: 154.29295

second angle stdev: 13.258568

69.57 67.46

165.38 171.75

first angle mean: 86.89324

first angle stdev: 34.366066

second angle mean: 154.33575

second angle stdev: 13.250799

75.42 69.75

162.19 155.91

first angle mean: 86.84911

first angle stdev: 34.307266

second angle mean: 154.36597

second angle stdev: 13.234224

77.72 73.22

157.38 151.66

first angle mean: 86.81413

first angle stdev: 34.24612

second angle mean: 154.37752

second angle stdev: 13.210159

82.53 81.95

158.73 163.95

first angle mean: 86.79778

first angle stdev: 34.181725

second angle mean: 154.39413

second angle stdev: 13.187656

88.39 89.13

160.4 166.07

first angle mean: 86.80384

first angle stdev: 34.11682

second angle mean: 154.41698

second angle stdev: 13.167749

93.09 94.14

160.51 166.04

first angle mean: 86.82765

first angle stdev: 34.054333

second angle mean: 154.44005

second angle stdev: 13.148116

99.99 101.19

157.49 164.14

first angle mean: 86.87732

first angle stdev: 33.9996

second angle mean: 154.45155

second angle stdev: 13.124617

104.58 107.51

152.29 161.15

first angle mean: 86.94387

first angle stdev: 33.95292

second angle mean: 154.44342

second angle stdev: 13.100592

108.14 114.48

146.18 156.22

first angle mean: 87.02326

first angle stdev: 33.914

second angle mean: 154.41246

second angle stdev: 13.085774

110.98 117.68

145.66 151.37

first angle mean: 87.11265

first angle stdev: 33.882168

second angle mean: 154.3798

second angle stdev: 13.072235

114.8 119.9

145.78 146.03

first angle mean: 87.215576

first angle stdev: 33.86108

second angle mean: 154.34784

second angle stdev: 13.058406

118.02 122.83

141.66 144.19

first angle mean: 87.329666

first angle stdev: 33.850075

second angle mean: 154.30086

second angle stdev: 13.056969

counter:4

120.95 129.78

135.17 143.14

first angle mean: 87.45373

first angle stdev: 33.849007

second angle mean: 154.23026

second angle stdev: 13.084375

121.46 130.73

131.94 139.77

first angle mean: 87.57875

first angle stdev: 33.849354

second angle mean: 154.14832

second angle stdev: 13.129791

121.01 130.38

128.13 137.23

first angle mean: 87.70121

first angle stdev: 33.84761

second angle mean: 154.05301

second angle stdev: 13.199642

121.5 128.68

127.43 131.41

first angle mean: 87.82456

first angle stdev: 33.847206

second angle mean: 153.95584

second angle stdev: 13.272981

121.61 127.73

126.97 128.48

first angle mean: 87.94742

first angle stdev: 33.84676

second angle mean: 153.85771

second angle stdev: 13.34803

121.64 127.9

125.78 128.28

first angle mean: 88.06949

first angle stdev: 33.84598

second angle mean: 153.75598

second angle stdev: 13.430203

121.48 127.71

127.52 128.29

first angle mean: 88.19011

first angle stdev: 33.844208

second angle mean: 153.66127

second angle stdev: 13.49797

121.2 126.63

131.04 128.2

first angle mean: 88.308846

first angle stdev: 33.841034

second angle mean: 153.5799

second angle stdev: 13.541563

120.1 123.92

132.85 130.32

first angle mean: 88.4228

first angle stdev: 33.833717

second angle mean: 153.5056

second angle stdev: 13.573922

116.6 120.4

132.58 134.66

first angle mean: 88.52343

first angle stdev: 33.81505

second angle mean: 153.43086

second angle stdev: 13.607042

111.51 116.26

131.6 138.17

first angle mean: 88.60523

first angle stdev: 33.782566

second angle mean: 153.35318

second angle stdev: 13.644879

106.42 110.6

133.19 138.95

first angle mean: 88.6684

first angle stdev: 33.73924

second angle mean: 153.28166

second angle stdev: 13.673297

101.36 104.49

134.72 135.92

first angle mean: 88.71325

first angle stdev: 33.687996

second angle mean: 153.21608

second angle stdev: 13.693485

96.34 100.05

134.71 135.98

first angle mean: 88.740105

first angle stdev: 33.631668

second angle mean: 153.15091

second angle stdev: 13.71324

91.79 97.72

138.09 140.55

first angle mean: 88.75081

first angle stdev: 33.573097

second angle mean: 153.09808

second angle stdev: 13.718099

88.17 94.63

145.27 145.68

first angle mean: 88.74877

first angle stdev: 33.51437

second angle mean: 153.0707

second angle stdev: 13.701888

84.53 89.14

150.55 148.96

first angle mean: 88.73408

first angle stdev: 33.456856

second angle mean: 153.06192

second angle stdev: 13.678803

78.22 82.08

152.08 151.03

first angle mean: 88.69757

first angle stdev: 33.404446

second angle mean: 153.05852

second angle stdev: 13.655157

robot count: 571.2

ROBOT: Exercise arms\_up\_and\_down\_stick done

73.15

151.8 144.4

first angle mean: TRAINING: Exercise 88.637024

arms\_up\_and\_down\_stickfirst angle stdev: done33.362427

second angle mean: 153.05415

second angle stdev:

13.631712

Directory created or already exists: Patients/55581599/Graphs/arms\_up\_and\_down\_stick/15-07-2024 13-09-46

Directory created or already exists: Patients/55581599/Graphs/arms\_up\_and\_down\_stick/15-07-2024 13-09-46

Directory created or already exists: Patients/55581599/Graphs/arms\_up\_and\_down\_stick/15-07-2024 13-09-46

Directory created or already exists: Patients/55581599/Graphs/arms\_up\_and\_down\_stick/15-07-2024 13-09-46

CAMERA: Exercise arms\_up\_and\_down\_stick done

C:\Users\yaels\יעל פרוייקט גמר\zedcheck\Email.py:14: FutureWarning: Setting an item of incompatible dtype is deprecated and will raise in a future error of pandas. Value '0 314808981

1 43372

2 4327

3 55581599

4 43817

5 1111

Name: ID, dtype: object' has dtype incompatible with int64, please explicitly cast to a compatible dtype first.

df.iloc[:, 0] = df.iloc[:, 0].astype(str)

Email sent successfully!

1277x701+0+0 200x200+0+0

TRAINING DONE

Process finished with exit code -1