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

pygame 2.5.2 (SDL 2.28.3, Python 3.11.9)

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

screen start

CAMERA INITIALIZATION

ROBOT INITIALIZATION

CAMERA START

MP INITIALIZATION

MP START

Training: start exercises

ROBOT START

CAMERA: Exercise hello\_waving start

CAMERA: Exercise hello\_waving done

TRAINING: Exercise bend\_elbows\_and\_up\_stick start

CAMERA: Exercise bend\_elbows\_and\_up\_stick start

ROBOT: Exercise bend\_elbows\_and\_up\_stick start

111.55 155.0

137.95 141.52

first angle mean: 111.55

first angle stdev: 0.0

second angle mean: 137.95

second angle stdev: 0.0

109.14 138.67

146.05 154.68

first angle mean: 110.345

first angle stdev: 1.2050018

second angle mean: 142.0

second angle stdev: 4.050003

112.1 138.07

154.42 162.03

first angle mean: 110.93

first angle stdev: 1.2854834

second angle mean: 146.14

second angle stdev: 6.724151

120.09 152.96

148.48 148.39

first angle mean: 113.22

first angle stdev: 4.1196647

second angle mean: 146.72499

second angle stdev: 5.910781

119.57 152.21

146.66 145.45

first angle mean: 114.490005

first angle stdev: 4.475367

second angle mean: 146.71199

second angle stdev: 5.2868266

120.05 152.29

146.62 142.83

first angle mean: 115.416664

first angle stdev: 4.5808644

second angle mean: 146.69666

second angle stdev: 4.826312

120.4 152.92

149.12 140.18

first angle mean: 116.12858

first angle stdev: 4.5855656

second angle mean: 147.04285

second angle stdev: 4.5480504

121.39 153.92

151.45 138.5

first angle mean: 116.786255

first angle stdev: 4.6289062

second angle mean: 147.59375

second angle stdev: 4.49706

121.87 154.66

151.39 138.55

first angle mean: 117.35111

first angle stdev: 4.6474257

second angle mean: 148.01556

second angle stdev: 4.4045258

121.74 155.15

151.76 139.88

first angle mean: 117.79

first angle stdev: 4.601339

second angle mean: 148.39

second angle stdev: 4.3268623

120.76 154.93

151.35 141.28

first angle mean: 118.060005

first angle stdev: 4.469515

second angle mean: 148.65909

second angle stdev: 4.2123466

119.17 153.95

150.19 141.95

first angle mean: 118.152504

first angle stdev: 4.290218

second angle mean: 148.78667

second angle stdev: 4.05515

117.73 153.42

149.5 142.08

first angle mean: 118.12

first angle stdev: 4.123445

second angle mean: 148.84154

second angle stdev: 3.9006963

116.4 152.94

149.59 140.06

first angle mean: 117.99715

first angle stdev: 3.9980664

second angle mean: 148.895

second angle stdev: 3.763744

116.31 152.07

149.38 138.01

first angle mean: 117.88467

first angle stdev: 3.8853586

second angle mean: 148.92734

second angle stdev: 3.6381342

116.05 151.59

148.89 137.47

first angle mean: 117.770004

first angle stdev: 3.7881048

second angle mean: 148.925

second angle stdev: 3.52262

115.94 151.43

148.78 136.08

first angle mean: 117.66235

first angle stdev: 3.7001407

second angle mean: 148.91647

second angle stdev: 3.4176137

114.74 151.33

146.55 134.35

first angle mean: 117.5

first angle stdev: 3.6576662

second angle mean: 148.785

second angle stdev: 3.3652675

113.39 151.95

145.88 131.51

first angle mean: 117.283676

first angle stdev: 3.6765006

second angle mean: 148.63213

second angle stdev: 3.3391244

112.73 152.5

142.5 128.75

first angle mean: 117.05599

first angle stdev: 3.718304

second angle mean: 148.32552

second angle stdev: 3.518294

110.6 151.64

138.1 124.48

first angle mean: 116.74857

first angle stdev: 3.8804202

second angle mean: 147.8386

second angle stdev: 4.0658245

109.1 150.52

133.94 122.68

first angle mean: 116.40091

first angle stdev: 4.112356

second angle mean: 147.20683

second angle stdev: 4.9153714

107.23 149.01

125.81 117.98

first angle mean: 116.002174

first angle stdev: 4.435534

second angle mean: 146.27654

second angle stdev: 6.492329

105.82 146.19

118.32 112.58

first angle mean: 115.57792

first angle stdev: 4.7952147

second angle mean: 145.11168

second angle stdev: 8.461825

102.77 142.28

114.88 109.95

first angle mean: 115.065605

first angle stdev: 5.326684

second angle mean: 143.9024

second angle stdev: 10.189907

100.05 136.53

111.89 106.2

first angle mean: 114.48808

first angle stdev: 5.968299

second angle mean: 142.67116

second angle stdev: 11.7362585

96.25 129.6

107.18 102.5

first angle mean: 113.8126

first angle stdev: 6.794451

second angle mean: 141.35666

second angle stdev: 13.32528

90.44 123.09

101.81 97.5

first angle mean: 112.97786

first angle stdev: 7.9579506

second angle mean: 139.94429

second angle stdev: 15.002723

85.93 116.67

97.83 92.57

first angle mean: 112.04517

first angle stdev: 9.246754

second angle mean: 138.49207

second angle stdev: 16.624392

80.51 107.0

93.71 86.41

first angle mean: 110.994

first angle stdev: 10.709636

second angle mean: 136.99933

second angle stdev: 18.214762

74.81 99.08

89.27 82.6

first angle mean: 109.826775

first angle stdev: 12.32351

second angle mean: 135.45967

second angle stdev: 19.803822

68.81 76.77

84.69 85.61

first angle mean: 108.545

first angle stdev: 14.073177

second angle mean: 133.87312

second angle stdev: 21.400162

64.27 69.91

79.7 85.17

first angle mean: 107.20333

first angle stdev: 15.800471

second angle mean: 132.23152

second angle stdev: 23.028795

60.33 65.87

79.44 85.64

first angle mean: 105.82471

first angle stdev: 17.465176

second angle mean: 130.67883

second angle stdev: 24.377975

56.84 64.64

81.35 80.95

first angle mean: 104.42515

first angle stdev: 19.050343

second angle mean: 129.26944

second angle stdev: 25.393768

57.1 63.15

82.43 79.38

first angle mean: 103.110565

first angle stdev: 20.33026

second angle mean: 127.968346

second angle stdev: 26.195053

55.69 62.81

81.31 79.53

first angle mean: 101.828926

first angle stdev: 21.477476

second angle mean: 126.707306

second angle stdev: 26.923653

55.12 64.16

75.62 77.11

first angle mean: 100.59975

first angle stdev: 22.473227

second angle mean: 125.36291

second angle stdev: 27.797153

55.52 67.65

75.18 74.27

first angle mean: 99.443855

first angle stdev: 23.299507

second angle mean: 124.07617

second angle stdev: 28.561966

55.83 67.8

75.79 78.79

first angle mean: 98.3535

first angle stdev: 23.992933

second angle mean: 122.868996

second angle stdev: 29.192856

55.67 67.69

74.5 77.75

first angle mean: 97.31244

first angle stdev: 24.596191

second angle mean: 121.68926

second angle stdev: 29.784353

55.1 67.03

74.0 76.99

first angle mean: 96.30739

first angle stdev: 25.139297

second angle mean: 120.5538

second angle stdev: 30.312473

59.77 71.34

75.18 78.11

first angle mean: 95.45768

first angle stdev: 25.448204

second angle mean: 119.498604

second angle stdev: 30.728533

robot count: 1

59.79 79.17

78.52 73.9

first angle mean: 94.64705

first angle stdev: 25.712812

second angle mean: 118.56727

second angle stdev: 30.985159

67.53 75.91

82.4 88.3

first angle mean: 94.04444

first angle stdev: 25.737797

second angle mean: 117.76355

second angle stdev: 31.099312

75.21 80.37

89.31 102.64

first angle mean: 93.635

first angle stdev: 25.604246

second angle mean: 117.145

second angle stdev: 31.03803

82.91 88.14

98.43 112.51

first angle mean: 93.406815

first angle stdev: 25.377634

second angle mean: 116.74681

second angle stdev: 30.824596

89.17 95.12

104.32 122.34

first angle mean: 93.31854

first angle stdev: 25.119183

second angle mean: 116.48792

second angle stdev: 30.553415

90.69 95.25

105.59 125.97

first angle mean: 93.2649

first angle stdev: 24.86432

second angle mean: 116.26552

second angle stdev: 30.279268

90.62 94.04

101.64 124.65

first angle mean: 93.212006

first angle stdev: 24.617207

second angle mean: 115.97301

second angle stdev: 30.0448

90.59 93.07

99.61 122.11

first angle mean: 93.16058

first angle stdev: 24.377377

second angle mean: 115.65216

second angle stdev: 29.835169

91.84 96.43

102.76 124.05

first angle mean: 93.135185

first angle stdev: 24.142523

second angle mean: 115.40423

second angle stdev: 29.5999

93.22 101.79

107.81 124.89

first angle mean: 93.136795

first angle stdev: 23.913681

second angle mean: 115.26095

second angle stdev: 29.337526

96.29 106.18

109.96 127.07

first angle mean: 93.19518

first angle stdev: 23.695036

second angle mean: 115.16278

second angle stdev: 29.073399

99.39 110.78

110.15 129.66

first angle mean: 93.30782

first angle stdev: 23.493223

second angle mean: 115.07163

second angle stdev: 28.815668

102.43 113.44

111.18 130.84

first angle mean: 93.47071

first angle stdev: 23.313839

second angle mean: 115.002144

second angle stdev: 28.561876

105.21 115.36

113.14 131.73

first angle mean: 93.67667

first angle stdev: 23.159765

second angle mean: 114.969475

second angle stdev: 28.31128

105.9 115.06

113.83 132.09

first angle mean: 93.887405

first angle stdev: 23.014309

second angle mean: 114.94984

second angle stdev: 28.06655

104.76 114.53

111.26 129.77

first angle mean: 94.071686

first angle stdev: 22.861557

second angle mean: 114.88729

second angle stdev: 27.831755

100.9 111.37

109.21 127.45

first angle mean: 94.18549

first angle stdev: 22.687092

second angle mean: 114.79267

second angle stdev: 27.608418

98.11 107.85

105.93 124.5

first angle mean: 94.249825

first angle stdev: 22.505882

second angle mean: 114.647385

second angle stdev: 27.4043

90.02 102.04

96.95 112.67

first angle mean: 94.1816

first angle stdev: 22.330002

second angle mean: 114.361946

second angle stdev: 27.273668

81.62 92.2

90.31 100.65

first angle mean: 93.982216

first angle stdev: 22.207638

second angle mean: 113.98016

second angle stdev: 27.222832

69.21 76.31

84.14 89.16

first angle mean: 93.59515

first angle stdev: 22.246616

second angle mean: 113.51391

second angle stdev: 27.261673

60.52 66.26

79.01 83.45

first angle mean: 93.0863

first angle stdev: 22.447033

second angle mean: 112.98308

second angle stdev: 27.382456

54.44 59.24

71.46 73.6

first angle mean: 92.500755

first angle stdev: 22.771063

second angle mean: 112.353935

second angle stdev: 27.643555

47.15 54.21

61.77 66.62

first angle mean: 91.823875

first angle stdev: 23.259857

second angle mean: 111.59895

second angle stdev: 28.113712

42.77 49.72

56.31 59.58

first angle mean: 91.10249

first angle stdev: 23.831299

second angle mean: 110.78588

second angle stdev: 28.688854

42.43 47.74

54.34 52.91

first angle mean: 90.3971

first angle stdev: 24.362593

second angle mean: 109.96782

second angle stdev: 29.26822

46.79 42.15

50.1 56.04

first angle mean: 89.77414

first angle stdev: 24.735281

second angle mean: 109.11257

second angle stdev: 29.914244

49.99 36.63

45.83 62.35

first angle mean: 89.213806

first angle stdev: 25.00391

second angle mean: 108.22127

second angle stdev: 30.62463

48.04 33.4

43.7 63.97

first angle mean: 88.641945

first angle stdev: 25.292898

second angle mean: 107.32514

second angle stdev: 31.334618

46.99 33.64

42.46 59.87

first angle mean: 88.07137

first angle stdev: 25.581387

second angle mean: 106.43658

second angle stdev: 32.019608

49.71 35.32

43.29 57.56

first angle mean: 87.55298

first angle stdev: 25.791115

second angle mean: 105.583244

second angle stdev: 32.627556

52.22 41.84

42.41 54.11

first angle mean: 87.08188

first angle stdev: 25.93716

second angle mean: 104.74094

second angle stdev: 33.209415

56.1 53.82

45.8 54.67

first angle mean: 86.67422

first angle stdev: 26.006695

second angle mean: 103.96539

second angle stdev: 33.666946

64.42 63.93

50.05 58.84

first angle mean: 86.3852

first angle stdev: 25.95983

second angle mean: 103.26519

second angle stdev: 34.000065

robot count: 2

80.31 83.69

58.67 68.03

first angle mean: 86.30732

first angle stdev: 25.801935

second angle mean: 102.69346

second angle stdev: 34.151917

85.13 108.85

67.58 80.3

first angle mean: 86.29241

first angle stdev: 25.638453

second angle mean: 102.248985

second angle stdev: 34.161366

97.28 126.92

82.21 92.18

first angle mean: 86.42975

first angle stdev: 25.506935

second angle mean: 101.9985

second angle stdev: 34.02012

103.08 139.34

99.58 104.5

first angle mean: 86.63531

first angle stdev: 25.415585

second angle mean: 101.96864

second angle stdev: 33.810516

105.01 143.28

108.13 109.24

first angle mean: 86.85939

first angle stdev: 25.340517

second angle mean: 102.04378

second angle stdev: 33.610527

113.04 151.6

121.9 122.9

first angle mean: 87.17482

first angle stdev: 25.34884

second angle mean: 102.28301

second angle stdev: 33.477608

117.82 155.38

129.58 128.99

first angle mean: 87.539635

first angle stdev: 25.415766

second angle mean: 102.60798

second angle stdev: 33.409172

121.39 159.19

135.08 136.53

first angle mean: 87.93788

first angle stdev: 25.528093

second angle mean: 102.990005

second angle stdev: 33.396114

122.98 162.2

139.42 144.38

first angle mean: 88.345345

first angle stdev: 25.655764

second angle mean: 103.413605

second angle stdev: 33.43029

123.68 163.84

143.71 147.65

first angle mean: 88.751495

first angle stdev: 25.784464

second angle mean: 103.876785

second angle stdev: 33.514004

122.95 164.36

144.54 148.66

first angle mean: 89.140114

first angle stdev: 25.892525

second angle mean: 104.33887

second angle stdev: 33.600613

123.89 161.15

143.99 138.58

first angle mean: 89.53056

first angle stdev: 26.005875

second angle mean: 104.784386

second angle stdev: 33.671688

125.66 160.0

142.65 129.97

first angle mean: 89.93201

first angle stdev: 26.136826

second angle mean: 105.205124

second angle stdev: 33.71853

125.35 161.41

141.4 142.55

first angle mean: 90.32121

first angle stdev: 26.253765

second angle mean: 105.602875

second angle stdev: 33.744385

124.16 162.3

140.44 149.82

first angle mean: 90.689026

first angle stdev: 26.345383

second angle mean: 105.981544

second angle stdev: 33.754326

124.12 162.08

138.94 152.71

first angle mean: 91.0485

first angle stdev: 26.429232

second angle mean: 106.33594

second angle stdev: 33.744007

124.8 161.16

138.35 151.15

first angle mean: 91.40756

first angle stdev: 26.515343

second angle mean: 106.676506

second angle stdev: 33.724354

124.49 159.75

140.21 147.27

first angle mean: 91.7558

first angle stdev: 26.590637

second angle mean: 107.029495

second angle stdev: 33.7205

123.86 158.65

142.22 143.92

first angle mean: 92.09021

first angle stdev: 26.65185

second angle mean: 107.39605

second angle stdev: 33.734154

123.48 158.75

143.44 143.69

first angle mean: 92.41382

first angle stdev: 26.703022

second angle mean: 107.76764

second angle stdev: 33.756725

119.54 158.34

138.19 141.23

first angle mean: 92.69062

first angle stdev: 26.70594

second angle mean: 108.07807

second angle stdev: 33.72294

113.55 157.06

134.12 138.75

first angle mean: 92.90132

first angle stdev: 26.652462

second angle mean: 108.341125

second angle stdev: 33.65309

109.47 154.74

131.33 134.71

first angle mean: 93.067

first angle stdev: 26.570059

second angle mean: 108.571014

second angle stdev: 33.562435

104.38 150.02

126.63 126.7

first angle mean: 93.17901

first angle stdev: 26.46191

second angle mean: 108.74982

second angle stdev: 33.443707

101.68 142.7

119.68 117.97

first angle mean: 93.26235

first angle stdev: 26.345198

second angle mean: 108.85697

second angle stdev: 33.296783

97.75 132.61

113.08 107.62

first angle mean: 93.30592

first angle stdev: 26.220686

second angle mean: 108.89797

second angle stdev: 33.13734

90.54 120.36

103.53 98.51

first angle mean: 93.279335

first angle stdev: 26.095716

second angle mean: 108.846344

second angle stdev: 32.981804

72.44 98.71

88.25 84.97

first angle mean: 93.08087

first angle stdev: 26.049904

second angle mean: 108.650185

second angle stdev: 32.885265

54.69 83.29

77.88 76.76

first angle mean: 92.7187

first angle stdev: 26.191006

second angle mean: 108.3599

second angle stdev: 32.86467

45.34 68.9

69.67 67.36

first angle mean: 92.2759

first angle stdev: 26.463951

second angle mean: 107.998314

second angle stdev: 32.921898

41.5 56.58

58.85 59.9

first angle mean: 91.805756

first angle stdev: 26.786324

second angle mean: 107.54323

second angle stdev: 33.10551

40.5 49.7

51.12 57.56

first angle mean: 91.33506

first angle stdev: 27.10816

second angle mean: 107.02559

second angle stdev: 33.389507

46.2 46.97

43.79 52.78

first angle mean: 90.92474

first angle stdev: 27.322578

second angle mean: 106.45072

second angle stdev: 33.77493

robot count: 3

51.74 47.74

33.89 41.14

first angle mean: 90.57173

first angle stdev: 27.450064

second angle mean: 105.79701

second angle stdev: 34.314346

52.21 43.36

38.06 45.41

first angle mean: 90.229195

first angle stdev: 27.564476

second angle mean: 105.19224

second angle stdev: 34.75

50.4 42.32

41.25 50.22

first angle mean: 89.87673

first angle stdev: 27.694601

second angle mean: 104.62637

second angle stdev: 35.110374

49.97 42.02

41.97 52.67

first angle mean: 89.526665

first angle stdev: 27.822834

second angle mean: 104.07675

second angle stdev: 35.440937

49.35 44.89

35.47 44.5

first angle mean: 89.1773

first angle stdev: 27.951614

second angle mean: 103.48017

second angle stdev: 35.85681

48.85 50.56

41.78 44.41

first angle mean: 88.82965

first angle stdev: 28.079466

second angle mean: 102.94827

second angle stdev: 36.1547

54.86 61.07

52.21 59.84

first angle mean: 88.539314

first angle stdev: 28.133537

second angle mean: 102.51462

second angle stdev: 36.30159

61.34 76.58

67.7 76.77

first angle mean: 88.30881

first angle stdev: 28.124807

second angle mean: 102.219574

second angle stdev: 36.288044

70.41 86.75

82.99 89.95

first angle mean: 88.1584

first angle stdev: 28.054003

second angle mean: 102.05798

second angle stdev: 36.177864

81.23 97.36

106.75 100.25

first angle mean: 88.10067

first angle stdev: 27.943966

second angle mean: 102.097084

second angle stdev: 36.02933

92.25 104.23

124.37 120.3

first angle mean: 88.13496

first angle stdev: 27.830791

second angle mean: 102.28116

second angle stdev: 35.936756

98.43 106.73

132.56 141.05

first angle mean: 88.219345

first angle stdev: 27.732037

second angle mean: 102.52934

second angle stdev: 35.893147

103.28 113.63

139.28 156.24

first angle mean: 88.34179

first angle stdev: 27.652166

second angle mean: 102.82813

second angle stdev: 35.898956

107.82 119.23

144.04 163.02

first angle mean: 88.49887

first angle stdev: 27.595486

second angle mean: 103.160484

second angle stdev: 35.94341

113.02 124.92

144.68 154.71

first angle mean: 88.69504

first angle stdev: 27.571554

second angle mean: 103.49264

second angle stdev: 35.989914

117.59 128.05

146.27 150.32

first angle mean: 88.92436

first angle stdev: 27.581354

second angle mean: 103.83214

second angle stdev: 36.047215

120.99 130.78

148.79 150.21

first angle mean: 89.17685

first angle stdev: 27.618353

second angle mean: 104.18614

second angle stdev: 36.124226

122.88 132.7

146.23 149.68

first angle mean: 89.440155

first angle stdev: 27.669823

second angle mean: 104.51461

second angle stdev: 36.172737

123.31 133.74

142.36 148.62

first angle mean: 89.70271

first angle stdev: 27.721977

second angle mean: 104.80799

second angle stdev: 36.18481

122.61 134.25

139.14 147.75

first angle mean: 89.95584

first angle stdev: 27.764404

second angle mean: 105.072075

second angle stdev: 36.169956

121.57 134.31

138.57 147.21

first angle mean: 90.197174

first angle stdev: 27.794765

second angle mean: 105.32778

second angle stdev: 36.149406

120.82 133.57

138.47 147.72

first angle mean: 90.42916

first angle stdev: 27.816303

second angle mean: 105.578865

second angle stdev: 36.126694

121.26 133.0

139.21 148.27

first angle mean: 90.66097

first angle stdev: 27.839224

second angle mean: 105.83173

second angle stdev: 36.107685

120.55 132.27

139.38 148.83

first angle mean: 90.884026

first angle stdev: 27.854185

second angle mean: 106.08209

second angle stdev: 36.08839

119.66 130.78

140.0 150.05

first angle mean: 91.097176

first angle stdev: 27.860308

second angle mean: 106.333336

second angle stdev: 36.07192

120.48 129.97

144.36 152.84

first angle mean: 91.31323

first angle stdev: 27.870968

second angle mean: 106.61294

second angle stdev: 36.085594

120.44 129.5

147.93 153.1

first angle mean: 91.52584

first angle stdev: 27.879532

second angle mean: 106.91453

second angle stdev: 36.125267

117.42 128.86

151.76 158.27

first angle mean: 91.71348

first angle stdev: 27.86502

second angle mean: 107.239494

second angle stdev: 36.194553

114.12 127.16

151.45 160.18

first angle mean: 91.87468

first angle stdev: 27.829107

second angle mean: 107.557556

second angle stdev: 36.257156

106.78 122.36

146.26 159.35

first angle mean: 91.98114

first angle stdev: 27.757936

second angle mean: 107.834

second angle stdev: 36.27416

98.08 112.93

138.95 155.43

first angle mean: 92.02439

first angle stdev: 27.664062

second angle mean: 108.05468

second angle stdev: 36.239483

90.02 98.5

126.52 131.39

first angle mean: 92.010284

first angle stdev: 27.566992

second angle mean: 108.18472

second angle stdev: 36.144653

81.06 88.28

112.63 119.96

first angle mean: 91.9337

first angle stdev: 27.485586

second angle mean: 108.2158

second angle stdev: 36.01996

73.35 78.83

99.2 109.68

first angle mean: 91.80466

first angle stdev: 27.433424

second angle mean: 108.1532

second angle stdev: 35.902477

robot count: 4

61.11 71.12

84.34 88.19

first angle mean: 91.59297

first angle stdev: 27.456427

second angle mean: 107.98897

second angle stdev: 35.832695

53.36 61.2

71.05 78.61

first angle mean: 91.33109

first angle stdev: 27.543337

second angle mean: 107.73596

second angle stdev: 35.839497

43.99 48.2

57.48 62.11

first angle mean: 91.00905

first angle stdev: 27.723944

second angle mean: 107.39408

second angle stdev: 35.955475

44.52 40.05

44.12 55.43

first angle mean: 90.69494

first angle stdev: 27.891361

second angle mean: 106.96656

second angle stdev: 36.20676

52.04 35.47

38.22 61.09

first angle mean: 90.43551

first angle stdev: 27.976202

second angle mean: 106.50517

second angle stdev: 36.519

47.61 38.76

40.27 54.4

first angle mean: 90.15

first angle stdev: 28.09974

second angle mean: 106.06361

second angle stdev: 36.794003

45.36 39.12

42.98 55.64

first angle mean: 89.85338

first angle stdev: 28.241177

second angle mean: 105.64583

second angle stdev: 37.027195

42.83 37.32

50.44 62.28

first angle mean: 89.54401

first angle stdev: 28.403671

second angle mean: 105.28263

second angle stdev: 37.174076

42.67 36.78

51.5 63.73

first angle mean: 89.23764

first angle stdev: 28.561554

second angle mean: 104.931114

second angle stdev: 37.304985

44.01 37.33

49.0 62.14

first angle mean: 88.943954

first angle stdev: 28.699505

second angle mean: 104.567924

second angle stdev: 37.454063

47.24 42.24

44.27 54.92

first angle mean: 88.6749

first angle stdev: 28.800974

second angle mean: 104.1789

second angle stdev: 37.643887

48.41 47.49

42.39 53.93

first angle mean: 88.416794

first angle stdev: 28.887798

second angle mean: 103.782814

second angle stdev: 37.845676

47.27 60.94

51.13 56.5

first angle mean: 88.15472

first angle stdev: 28.98111

second angle mean: 103.44745

second angle stdev: 37.95679

57.64 77.5

68.16 67.38

first angle mean: 87.96158

first angle stdev: 28.990429

second angle mean: 103.224106

second angle stdev: 37.939827

77.45 83.79

93.0 95.97

first angle mean: 87.89548

first angle stdev: 28.911064

second angle mean: 103.15981

second angle stdev: 37.828964

89.91 94.94

108.32 117.17

first angle mean: 87.908066

first angle stdev: 28.821012

second angle mean: 103.19206

second angle stdev: 37.71276

96.2 100.55

116.86 133.31

first angle mean: 87.959564

first angle stdev: 28.73875

second angle mean: 103.276955

second angle stdev: 37.61079

99.57 107.17

122.77 140.53

first angle mean: 88.031235

first angle stdev: 28.664341

second angle mean: 103.39728

second angle stdev: 37.5256

103.58 114.17

127.51 142.12

first angle mean: 88.12663

first angle stdev: 28.602062

second angle mean: 103.54521

second angle stdev: 37.457664

108.3 121.65

131.63 145.31

first angle mean: 88.24963

first angle stdev: 28.557941

second angle mean: 103.71646

second angle stdev: 37.407238

114.15 126.9

134.8 144.34

first angle mean: 88.40661

first angle stdev: 28.542147

second angle mean: 103.90484

second angle stdev: 37.371662

117.11 127.74

129.73 140.98

first angle mean: 88.57951

first angle stdev: 28.542599

second angle mean: 104.06042

second angle stdev: 37.312477

117.06 126.11

120.75 133.56

first angle mean: 88.75006

first angle stdev: 28.54172

second angle mean: 104.160355

second angle stdev: 37.222874

116.16 123.98

113.48 124.72

first angle mean: 88.913216

first angle stdev: 28.534645

second angle mean: 104.21584

second angle stdev: 37.11885

115.77 123.16

109.86 117.31

first angle mean: 89.07213

first angle stdev: 28.524567

second angle mean: 104.24924

second angle stdev: 37.011402

115.34 123.84

108.01 115.45

first angle mean: 89.22665

first angle stdev: 28.511395

second angle mean: 104.271355

second angle stdev: 36.903503

114.5 123.44

107.91 116.15

first angle mean: 89.37444

first angle stdev: 28.493147

second angle mean: 104.29264

second angle stdev: 36.796486

115.73 124.28

109.91 119.25

first angle mean: 89.52768

first angle stdev: 28.48077

second angle mean: 104.325294

second angle stdev: 36.69185

118.75 126.72

115.09 124.01

first angle mean: 89.696594

first angle stdev: 28.48461

second angle mean: 104.38752

second angle stdev: 36.59475

120.5 128.75

122.95 129.62

first angle mean: 89.87363

first angle stdev: 28.497927

second angle mean: 104.49421

second angle stdev: 36.516407

120.51 129.08

129.17 136.08

first angle mean: 90.04869

first angle stdev: 28.510063

second angle mean: 104.6352

second angle stdev: 36.4594

116.89 127.94

133.79 141.95

first angle mean: 90.201195

first angle stdev: 28.50045

second angle mean: 104.80086

second angle stdev: 36.421658

112.48 124.96

135.57 145.35

first angle mean: 90.327065

robot count: 5first angle stdev:

28.468842

second angle mean: 104.9747

second angle stdev: 36.391777

106.39 122.41

130.59 147.42

first angle mean: 90.417305

first angle stdev: 28.414135

second angle mean: 105.11861

second angle stdev: 36.339874

100.43 116.76

123.89 143.54

first angle mean: 90.47324

first angle stdev: 28.344482

second angle mean: 105.223465

second angle stdev: 36.265224

96.37 109.02

118.32 135.3

first angle mean: 90.506

first angle stdev: 28.269035

second angle mean: 105.29623

second angle stdev: 36.17745

92.3 100.52

107.53 118.74

first angle mean: 90.51591

first angle stdev: 28.191149

second angle mean: 105.30857

second angle stdev: 36.07775

84.5 93.88

92.44 103.99

first angle mean: 90.48285

first angle stdev: 28.117111

second angle mean: 105.23788

second angle stdev: 35.99107

71.35 82.69

76.71 84.59

first angle mean: 90.37831

first angle stdev: 28.075634

second angle mean: 105.08198

second angle stdev: 35.95416

61.51 74.23

70.34 74.45

first angle mean: 90.22141

first angle stdev: 28.079565

second angle mean: 104.89315

second angle stdev: 35.94719

54.62 69.25

66.3 70.6

first angle mean: 90.02897

first angle stdev: 28.124973

second angle mean: 104.68455

second angle stdev: 35.961407

44.52 62.33

55.41 67.32

first angle mean: 89.784294

first angle stdev: 28.245996

second angle mean: 104.419624

second angle stdev: 36.045162

43.81 52.58

50.89 65.84

first angle mean: 89.538445

first angle stdev: 28.369213

second angle mean: 104.13337

second angle stdev: 36.160015

46.6 43.32

49.31 72.93

first angle mean: 89.31005

first angle stdev: 28.465525

second angle mean: 103.84176

second angle stdev: 36.283524

47.85 39.74

50.59 76.11

first angle mean: 89.09068

first angle stdev: 28.549006

second angle mean: 103.56

second angle stdev: 36.393036

43.42 37.62

62.27 77.25

first angle mean: 88.85031

first angle stdev: 28.664892

second angle mean: 103.34268

second angle stdev: 36.419884

36.21 38.09

70.44 72.42

first angle mean: 88.57471

first angle stdev: 28.841047

second angle mean: 103.17041

second angle stdev: 36.401947

43.68 38.55

57.41 73.21

first angle mean: 88.34088

first angle stdev: 28.94679

second angle mean: 102.93209

second angle stdev: 36.456135

53.05 48.31

57.76 67.08

first angle mean: 88.15803

first angle stdev: 28.982662

second angle mean: 102.69802

second angle stdev: 36.50591

65.43 63.66

63.4 65.75

first angle mean: 88.04088

first angle stdev: 28.95365

second angle mean: 102.49547

second angle stdev: 36.520287

79.08 80.8

69.8 67.93

first angle mean: 87.99492

first angle stdev: 28.886406

second angle mean: 102.3278

second angle stdev: 36.50131

80.49 83.44

85.56 85.22

first angle mean: 87.956635

first angle stdev: 28.817583

second angle mean: 102.24225

second angle stdev: 36.42767

88.74 91.71

104.66 115.35

first angle mean: 87.96061

first angle stdev: 28.744404

second angle mean: 102.254524

second angle stdev: 36.3355

97.3 99.61

117.0 128.23

first angle mean: 88.007774

first angle stdev: 28.679367

second angle mean: 102.328995

second angle stdev: 36.258698

102.27 109.45

126.14 133.09

first angle mean: 88.07944

first angle stdev: 28.624987

second angle mean: 102.44864

second angle stdev: 36.20665

108.49 120.76

135.76 142.41

first angle mean: 88.1815

first angle stdev: 28.589605

second angle mean: 102.6152

second angle stdev: 36.192364

113.05 124.79

137.29 146.62

first angle mean: 88.30523

first angle stdev: 28.572023

second angle mean: 102.78771

second angle stdev: 36.184563

116.68 126.89

138.21 147.54

first angle mean: 88.4457

first angle stdev: 28.570704

second angle mean: 102.963066

second angle stdev: 36.1804

120.24 128.67

140.9 145.65

first angle mean: 88.60231

first angle stdev: 28.587048

second angle mean: 103.149956

second angle stdev: 36.18878

122.85 129.63

144.31 143.19

first angle mean: 88.7702

first angle stdev: 28.617033

second angle mean: 103.351715

second angle stdev: 36.214252

122.56 130.46

149.98 143.59

first angle mean: 88.93502

first angle stdev: 28.64406

second angle mean: 103.57917

second angle stdev: 36.2716

123.19 131.22

152.3 144.83

first angle mean: 89.10132

first angle stdev: 28.673468

second angle mean: 103.81569

second angle stdev: 36.341564

123.06 132.62

152.1 146.22

first angle mean: 89.26536

first angle stdev: 28.700872

second angle mean: 104.048935

second angle stdev: 36.407932

122.18 132.39

150.0 147.89

first angle mean: 89.423615

first angle stdev: 28.722172

second angle mean: 104.26985

second angle stdev: 36.459114

119.66 130.68

152.32 150.49

first angle mean: 89.56828

first angle stdev: 28.729242

second angle mean: 104.499756

second angle stdev: 36.52261

118.35 128.89

152.2 152.3

first angle mean: 89.70534

first angle stdev: 28.729168

second angle mean: 104.726906

second angle stdev: 36.583225

117.23 128.05

148.43 154.87

first angle mean: 89.83579

first angle stdev: 28.72328

second angle mean: 104.93403

second angle stdev: 36.61965

111.32 120.49

146.03 150.77

first angle mean: 89.93713

first angle stdev: 28.693241

second angle mean: 105.12788

second angle stdev: 36.641533

robot count: 6

105.59 112.25

144.3 144.79

first angle mean: 90.01062

first angle stdev: 28.645798

second angle mean: 105.31178

second angle stdev: 36.653362

100.92 102.65

137.36 136.12

first angle mean: 90.0616

first angle stdev: 28.588474

second angle mean: 105.46154

second angle stdev: 36.632885

89.65 88.33

122.81 121.52

first angle mean: 90.059685

first angle stdev: 28.521925

second angle mean: 105.54224

second angle stdev: 36.566647

79.05 80.44

110.17 109.29

first angle mean: 90.008705

first angle stdev: 28.465637

second angle mean: 105.56366

second angle stdev: 36.483257

63.6 69.78

92.33 91.3

first angle mean: 89.88701

first angle stdev: 28.45624

second angle mean: 105.50267

second angle stdev: 36.41013

56.97 65.14

86.47 82.8

first angle mean: 89.73601

first angle stdev: 28.477898

second angle mean: 105.41537

second angle stdev: 36.349285

46.51 58.92

77.5 73.08

first angle mean: 89.538635

first angle stdev: 28.561869

second angle mean: 105.2879

second angle stdev: 36.315002

40.85 52.37

66.05 67.13

first angle mean: 89.317314

first angle stdev: 28.684467

second angle mean: 105.10954

second angle stdev: 36.32838

44.11 43.44

60.2 70.0

first angle mean: 89.11276

first angle stdev: 28.779877

second angle mean: 104.90634

second angle stdev: 36.371204

44.06 37.69

66.22 78.31

first angle mean: 88.90982

first angle stdev: 28.873035

second angle mean: 104.73207

second angle stdev: 36.381542

38.84 36.15

90.91 87.76

first angle mean: 88.685295

first angle stdev: 29.00182

second angle mean: 104.67009

second angle stdev: 36.311626

36.56 40.52

104.68 84.5

first angle mean: 88.45258

first angle stdev: 29.144917

second angle mean: 104.67013

second angle stdev: 36.23048

35.86 46.48

107.49 78.13

first angle mean: 88.21885

first angle stdev: 29.289751

second angle mean: 104.68267

second angle stdev: 36.150364

37.18 43.73

98.73 78.16

first angle mean: 87.99301

first angle stdev: 29.420553

second angle mean: 104.656334

second angle stdev: 36.072464

43.34 41.47

67.05 74.85

first angle mean: 87.796295

first angle stdev: 29.504251

second angle mean: 104.49066

second angle stdev: 36.07898

49.87 49.42

52.6 71.7

first angle mean: 87.62995

first angle stdev: 29.545963

second angle mean: 104.26307

second angle stdev: 36.162712

58.87 61.18

59.55 69.13

first angle mean: 87.504364

first angle stdev: 29.54231

second angle mean: 104.067825

second angle stdev: 36.203915

76.69 76.53

77.17 75.82

first angle mean: 87.45735

first angle stdev: 29.486603

second angle mean: 103.95087

second angle stdev: 36.168446

83.01 86.1

89.96 92.41

first angle mean: 87.438095

first angle stdev: 29.424158

second angle mean: 103.890305

second angle stdev: 36.10176

91.1 91.79

99.57 118.45

first angle mean: 87.45388

first angle stdev: 29.361656

second angle mean: 103.87168

second angle stdev: 36.024986

95.01 98.3

103.79 126.69

first angle mean: 87.486305

first angle stdev: 29.302744

second angle mean: 103.87133

second angle stdev: 35.947594

100.1 106.94

113.15 131.1

first angle mean: 87.540215

first angle stdev: 29.251638

second angle mean: 103.91099

second angle stdev: 35.87581

102.96 111.18

118.78 133.77

first angle mean: 87.60583

first angle stdev: 29.206587

second angle mean: 103.97426

second angle stdev: 35.812477

109.05 119.22

125.33 139.06

first angle mean: 87.696686

first angle stdev: 29.177912

second angle mean: 104.06475

second angle stdev: 35.763435

114.99 123.66

133.54 141.58

first angle mean: 87.81186

first angle stdev: 29.169989

second angle mean: 104.18912

second angle stdev: 35.73901

118.2 125.67

139.48 142.44

first angle mean: 87.93954

first angle stdev: 29.174934

second angle mean: 104.337395

second angle stdev: 35.73683

120.56 126.49

145.01 141.47

first angle mean: 88.07602

first angle stdev: 29.189877

second angle mean: 104.50758

second angle stdev: 35.7585

122.87 128.6

144.15 139.65

first angle mean: 88.22099

first angle stdev: 29.2151

second angle mean: 104.67275

second angle stdev: 35.775177

123.84 130.88

143.26 139.23

first angle mean: 88.36879

first angle stdev: 29.244194

second angle mean: 104.83286

second angle stdev: 35.78694

123.73 134.5

142.93 143.64

first angle mean: 88.514915

first angle stdev: 29.271738

second angle mean: 104.99029

second angle stdev: 35.79645

123.26 135.6

143.43 145.8

first angle mean: 88.6579

first angle stdev: 29.29601

second angle mean: 105.148476

second angle stdev: 35.807377

122.01 131.7

145.81 146.25

first angle mean: 88.794586

first angle stdev: 29.313457

second angle mean: 105.315125

second angle stdev: 35.828224

119.46 126.49

145.68 144.02

first angle mean: 88.919754

first angle stdev: 29.318836

second angle mean: 105.47988

second angle stdev: 35.84753

117.63 125.45

146.81 143.7

first angle mean: 89.03646

first angle stdev: 29.316156

second angle mean: 105.64788

second angle stdev: 35.87112

115.72 125.39

142.41 146.58

first angle mean: 89.144485

first angle stdev: 29.305773

second angle mean: 105.796715

second angle stdev: 35.874462

114.89 124.33

140.13 149.45

first angle mean: 89.24831

first angle stdev: 29.292103

second angle mean: 105.935165

second angle stdev: 35.868114

114.14 122.75

140.96 153.1

first angle mean: 89.348274

first angle stdev: 29.275583

second angle mean: 106.07583

second angle stdev: 35.864494

106.41 116.25

140.7 151.12

first angle mean: 89.41653

first angle stdev: 29.236813

second angle mean: 106.21432

robot count: 7

second angle stdev: 35.85935

98.46 106.26

129.71 139.75

first angle mean: 89.45255

first angle stdev: 29.184076

second angle mean: 106.30793

second angle stdev: 35.818436

94.28 99.44

120.66 125.8

first angle mean: 89.47171

first angle stdev: 29.127695

second angle mean: 106.36488

second angle stdev: 35.758682

81.05 86.06

99.18 104.56

first angle mean: 89.438416

first angle stdev: 29.074875

second angle mean: 106.33649

second angle stdev: 35.690792

73.22 79.96

84.74 94.67

first angle mean: 89.37457

first angle stdev: 29.035353

second angle mean: 106.25146

second angle stdev: 35.64613

61.84 75.94

73.32 79.36

first angle mean: 89.26659

first angle stdev: 29.029417

second angle mean: 106.12232

second angle stdev: 35.635654

56.23 68.63

61.77 66.19

first angle mean: 89.137535

first angle stdev: 29.04586

second angle mean: 105.949066

second angle stdev: 35.673428

51.89 57.6

51.0 58.69

first angle mean: 88.99261

first angle stdev: 29.081896

second angle mean: 105.73526

second angle stdev: 35.767925

50.9 47.33

47.84 58.47

first angle mean: 88.84496

first angle stdev: 29.12183

second angle mean: 105.51086

second angle stdev: 35.879345

46.46 43.0

62.73 69.91

first angle mean: 88.68131

first angle stdev: 29.184174

second angle mean: 105.34568

second angle stdev: 35.90816

40.32 40.24

76.48 79.54

first angle mean: 88.49531

first angle stdev: 29.28141

second angle mean: 105.23466

second angle stdev: 35.88355

34.19 40.03

91.7 85.08

first angle mean: 88.28724

first angle stdev: 29.4172

second angle mean: 105.1828

second angle stdev: 35.8245

32.92 44.87

96.24 84.39

first angle mean: 88.07592

first angle stdev: 29.558832

second angle mean: 105.14866

second angle stdev: 35.760323

35.14 44.22

95.58 84.06

first angle mean: 87.87463

first angle stdev: 29.681927

second angle mean: 105.11229

second angle stdev: 35.69713

42.61 44.26

73.7 79.57

first angle mean: 87.703186

first angle stdev: 29.75586

second angle mean: 104.99329

second angle stdev: 35.68167

48.79 43.82

61.39 76.98

first angle mean: 87.556335

first angle stdev: 29.795343

second angle mean: 104.82876

second angle stdev: 35.714485

51.99 50.49

62.28 79.58

first angle mean: 87.42264

first angle stdev: 29.81883

second angle mean: 104.66879

second angle stdev: 35.742268

62.78 61.1

78.19 98.9

first angle mean: 87.330345

first angle stdev: 29.800978

second angle mean: 104.569626

second angle stdev: 35.711918

72.52 73.47

105.51 132.33

first angle mean: 87.27508

first angle stdev: 29.759031

second angle mean: 104.57314

second angle stdev: 35.64528

78.17 82.16

123.39 142.45

first angle mean: 87.24123

first angle stdev: 29.708834

second angle mean: 104.64308

second angle stdev: 35.59738

89.01 93.84

132.17 136.97

first angle mean: 87.24778

first angle stdev: 29.65396

second angle mean: 104.74504

second angle stdev: 35.570724

96.38 100.95

130.6 133.17

first angle mean: 87.28148

first angle stdev: 29.604376

second angle mean: 104.84043

second angle stdev: 35.53963

102.51 107.75

122.02 129.73

first angle mean: 87.33746

first angle stdev: 29.564276

second angle mean: 104.9036

second angle stdev: 35.48947

106.42 113.1

115.27 133.9

first angle mean: 87.407364

first angle stdev: 29.532589

second angle mean: 104.94158

second angle stdev: 35.429947

108.48 116.85

116.95 137.12

first angle mean: 87.48427

first angle stdev: 29.506023

second angle mean: 104.985405

second angle stdev: 35.37265

109.66 122.15

122.49 140.95

first angle mean: 87.56491

first angle stdev: 29.48256

second angle mean: 105.04906

second angle stdev: 35.323997

113.16 126.06

127.05 141.43

first angle mean: 87.657646

first angle stdev: 29.469254

second angle mean: 105.12876

second angle stdev: 35.284714

115.64 130.69

132.59 142.97

first angle mean: 87.75867

first angle stdev: 29.463846

second angle mean: 105.227905

second angle stdev: 35.259453

117.13 135.46

131.98 143.18

first angle mean: 87.86432

first angle stdev: 29.463327

second angle mean: 105.324135

second angle stdev: 35.232403

117.78 137.96

130.1 141.66

first angle mean: 87.97154

first angle stdev: 29.464764

second angle mean: 105.41293

second angle stdev: 35.20036

118.69 138.99

129.15 140.67

first angle mean: 88.08125

first angle stdev: 29.469133

second angle mean: 105.49771

second angle stdev: 35.165966

120.79 140.72

128.94 141.88

first angle mean: 88.19765

first angle stdev: 29.481064

second angle mean: 105.58113

second angle stdev: 35.131084

120.78 140.25

129.41 140.93

first angle mean: 88.31319

first angle stdev: 29.49241

second angle mean: 105.665634

second angle stdev: 35.097332

119.32 138.3

129.4 141.36

first angle mean: 88.42275

first angle stdev: 29.497696

second angle mean: 105.749504

second angle stdev: 35.06356

117.86 136.03

131.44 145.62

first angle mean: 88.526405

first angle stdev: 29.4973

second angle mean: 105.83996

second angle stdev: 35.034843

117.68 130.65

135.03 148.71

first angle mean: 88.6287

first angle stdev: 29.495922

second angle mean: 105.94238

second angle stdev: 35.01589

114.99 126.7

137.84 149.77

first angle mean: 88.72086

first angle stdev: 29.4854

second angle mean: 106.05392

second angle stdev: 35.005295

111.26 123.88

139.22 152.64

first angle mean: 88.79941

first angle stdev: 29.463936

second angle mean: 106.16947

second angle stdev: 34.998863

108.99 121.89

139.47 152.57

first angle mean: 88.86952

first angle stdev: 29.436707

second angle mean: 106.2851

second angle stdev: 34.99292

robot count: 8107.95

ROBOT: Exercise 120.25bend\_elbows\_and\_up\_stick

done138.74

TRAINING: Exercise bend\_elbows\_and\_up\_stick 151.14 done

first angle mean: 88.93554

first angle stdev: 29.407087

second angle mean: 106.39741

second angle stdev: 34.984272

C:\Users\yaels\יעל פרוייקט גמר\zedcheck\Excel.py:287: UserWarning: Starting a Matplotlib GUI outside of the main thread will likely fail.

plt.plot(plot\_data['x'], plot\_data['y'])

Directory created or already exists: Patients/1111/Graphs/bend\_elbows\_and\_up\_stick/28-06-2024 15-45-57

C:\Users\yaels\יעל פרוייקט גמר\zedcheck\Excel.py:287: UserWarning: Starting a Matplotlib GUI outside of the main thread will likely fail.

plt.plot(plot\_data['x'], plot\_data['y'])

Directory created or already exists: Patients/1111/Graphs/bend\_elbows\_and\_up\_stick/28-06-2024 15-45-57

C:\Users\yaels\יעל פרוייקט גמר\zedcheck\Excel.py:287: UserWarning: Starting a Matplotlib GUI outside of the main thread will likely fail.

plt.plot(plot\_data['x'], plot\_data['y'])