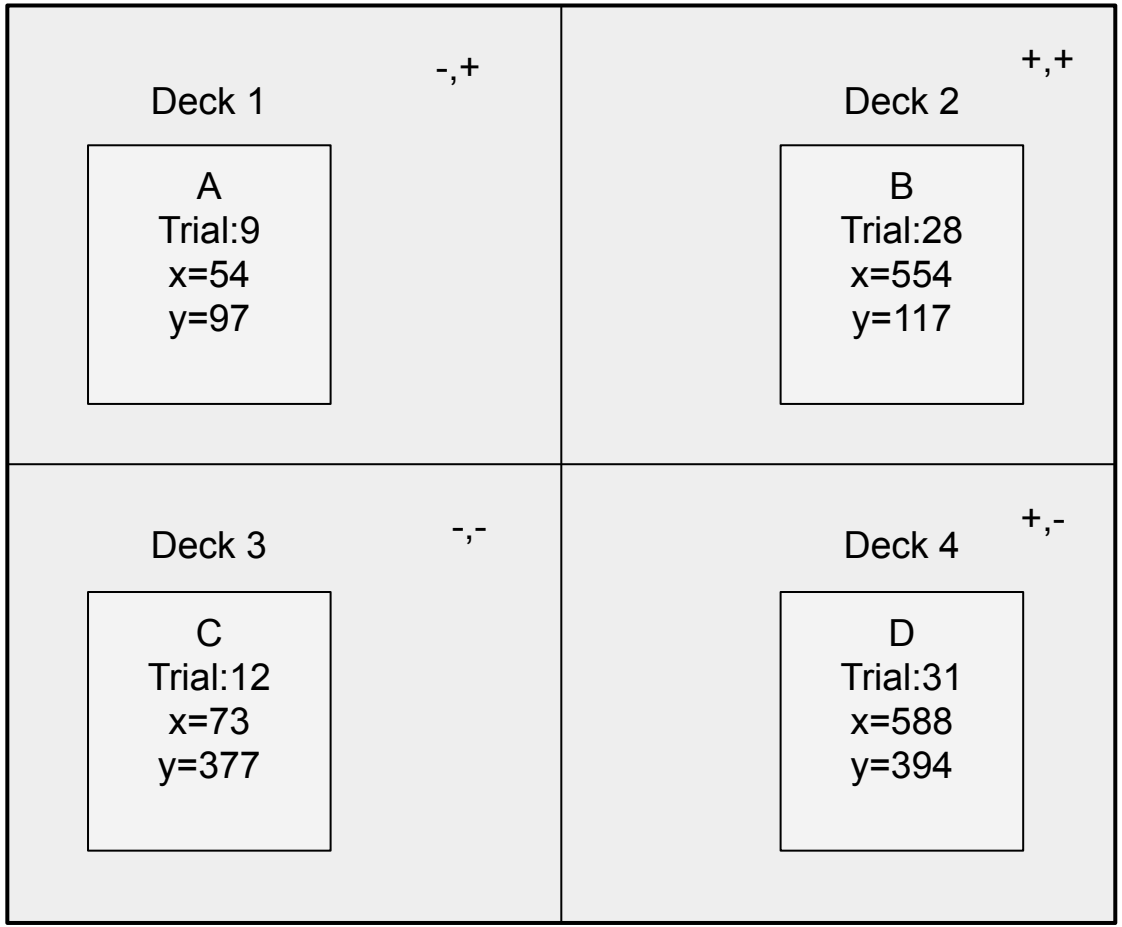
Counterbalanced Order Explanation

IGT Koop & Johnson 2011

Order 1

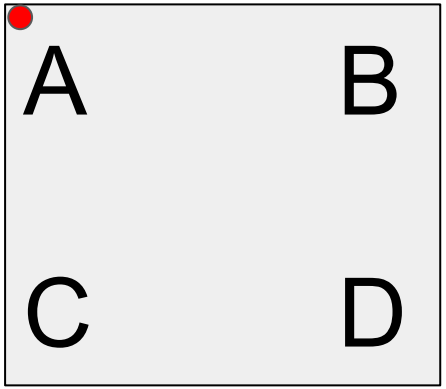
MATLAB: order1transform.mat

Order #1
Participant #13



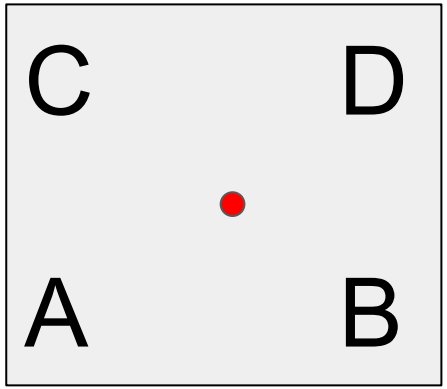
Transforming Order #1

Assuming a typical screen resolution of 640X480



Original

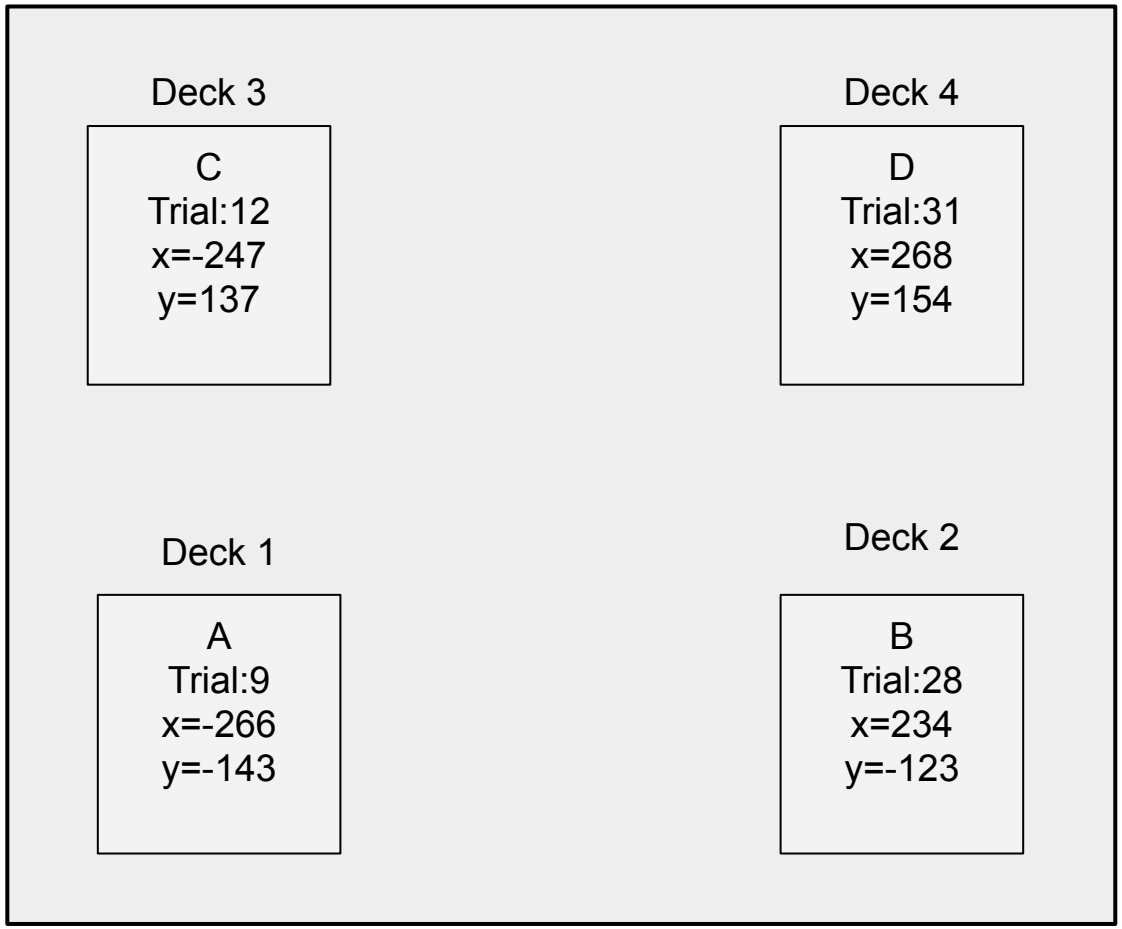
STEP 1



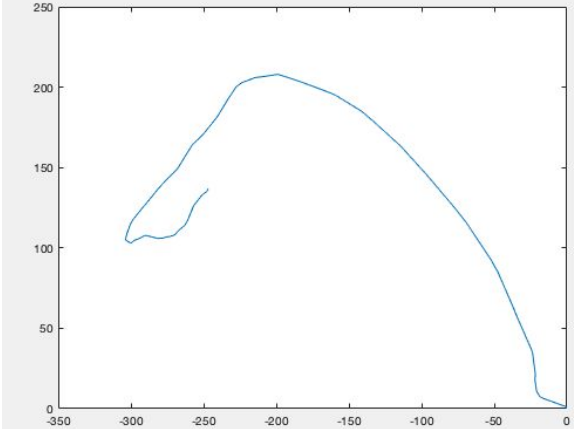
<u>Center the origin</u>

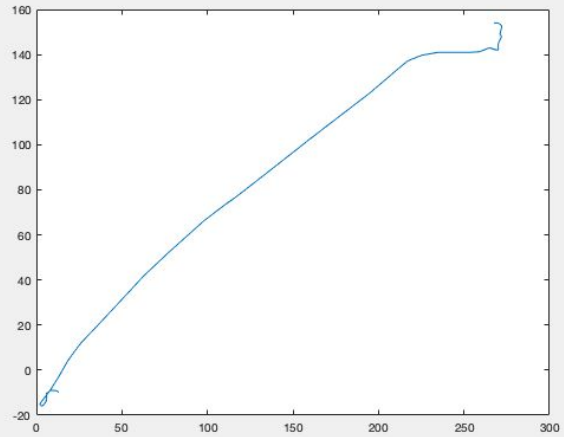
- Subtract 320 from all X coordinates
- Subtract 240 from all Y coordinates

Order #1
Participant #13



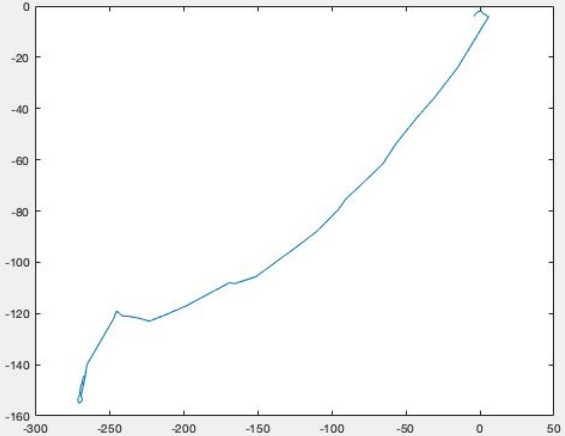
C
Trial:12
x=-247
y=137

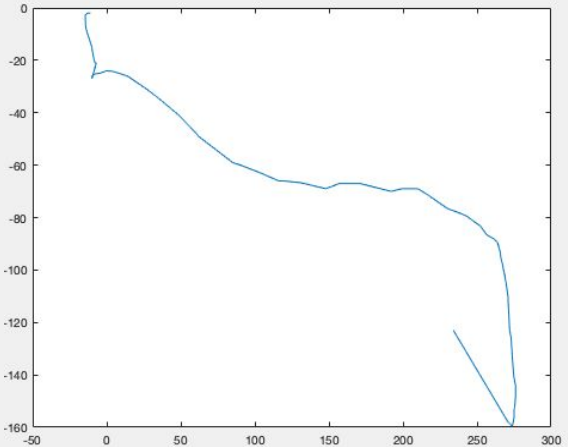




D
Trial:31
x=268
y=154

A
Trial:9
x=-266
y=-143



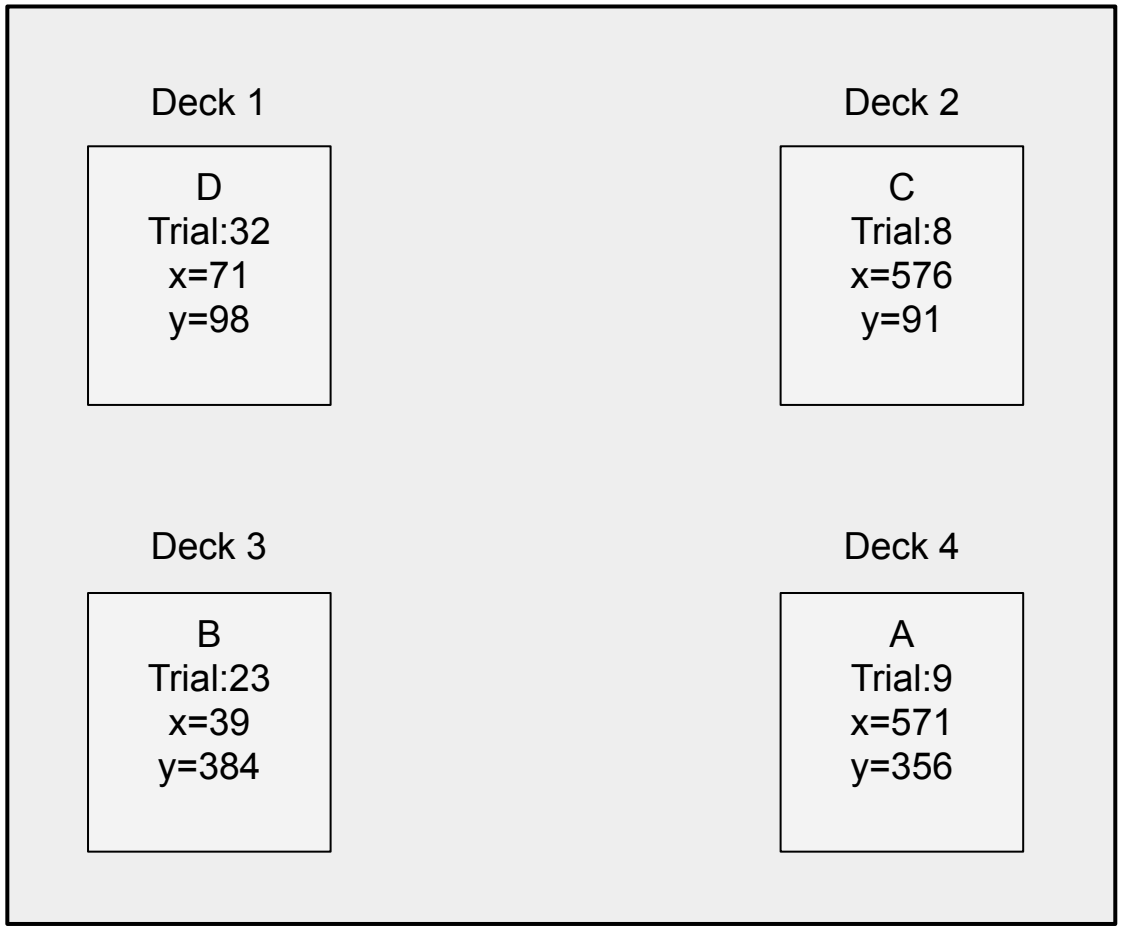


B
Trial:28
x=234
y=-123

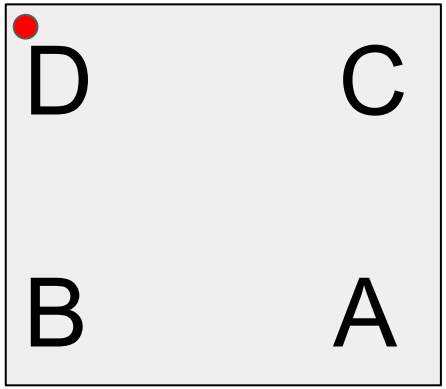
Order 2

MATLAB: order2transform.mat

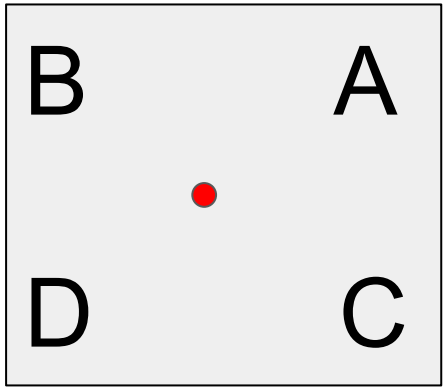
Order #2
Participant #19



Transforming Order #2



Original



STEP 1

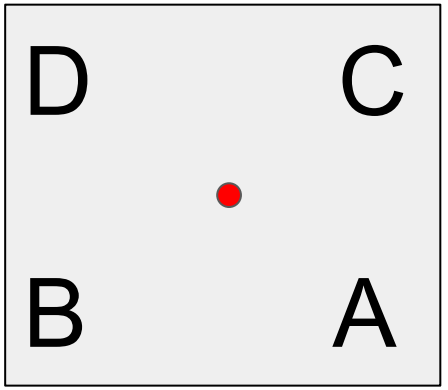
Center the origin

- Subtract 320 from all X coordinates
- Subtract 240 from all Y coordinates

STEP 2

Flip over x-axis

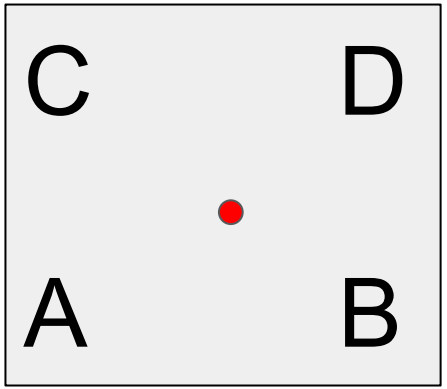
- Change the sign of all x-coordinates



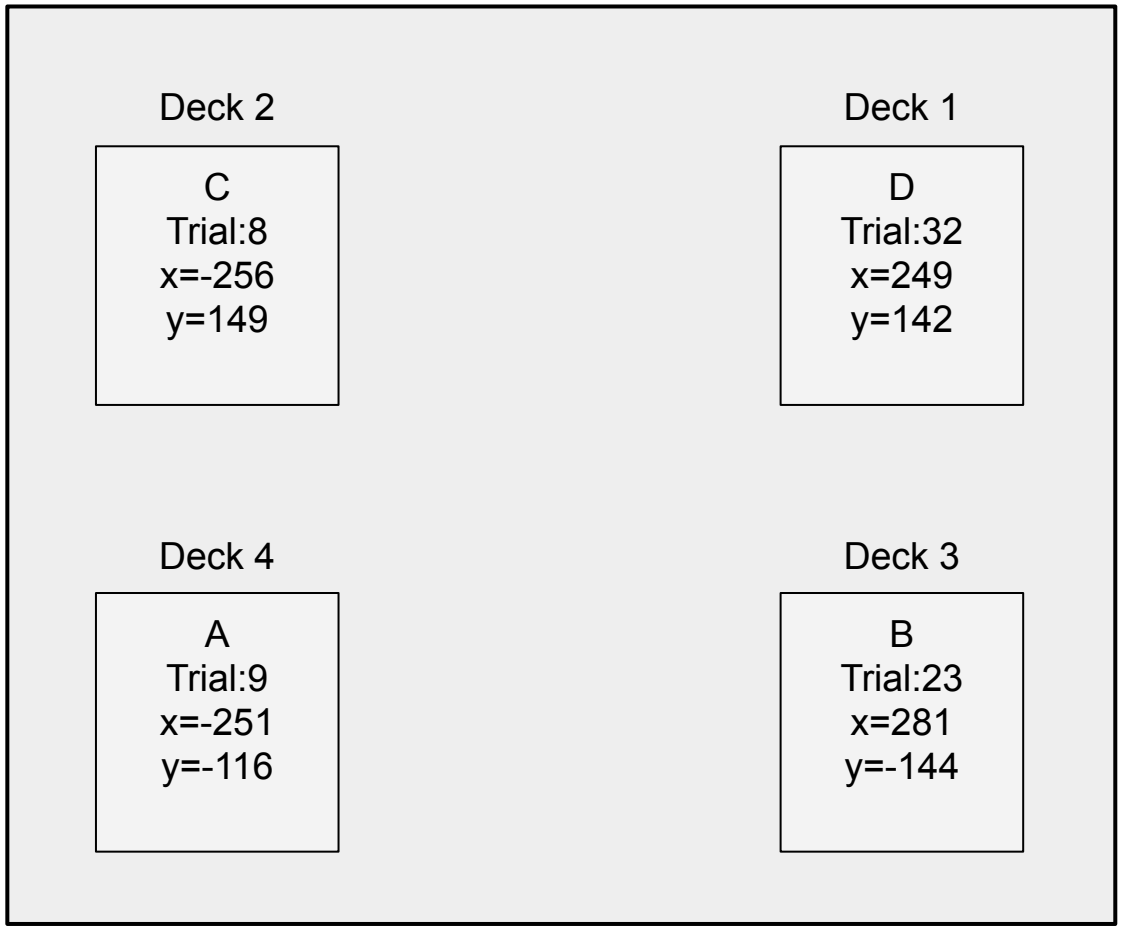
STEP 3

Flip over y-axis

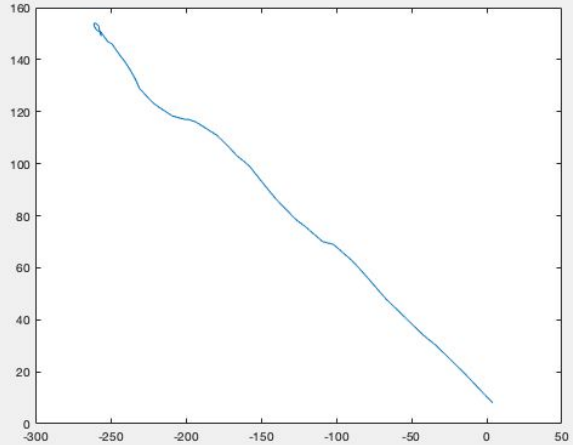
- Change the sign of all y-coordinates

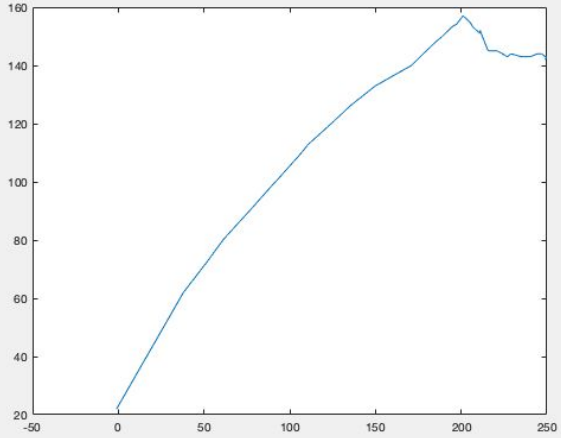


Order #2
Participant #19



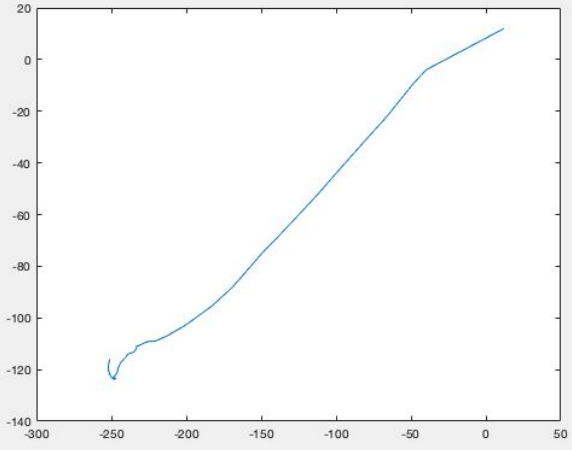
C
Trial:8
x=-256
y=149

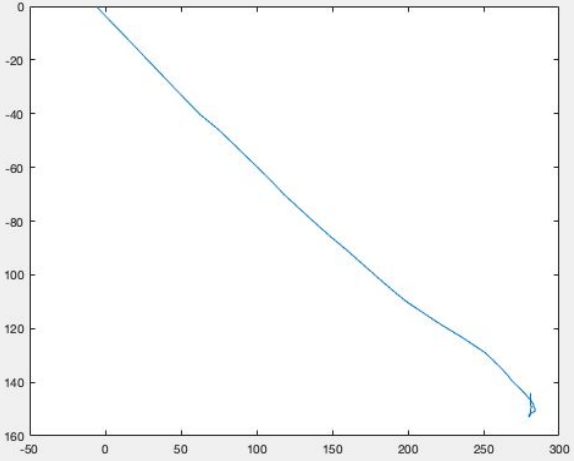




D
Trial:32
x=249
y=142

A
Trial:9
x=-251
y=-116



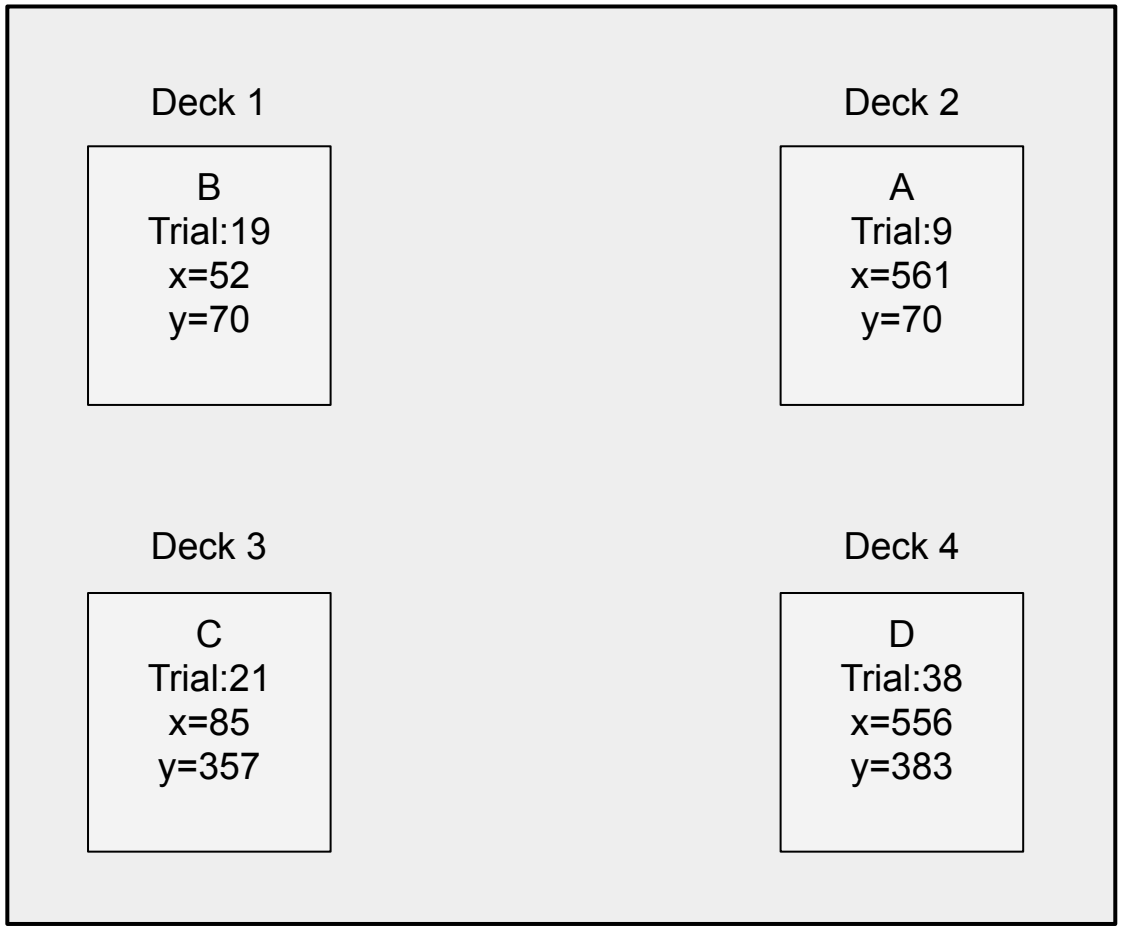


B
Trial:23
x=281
y=-144

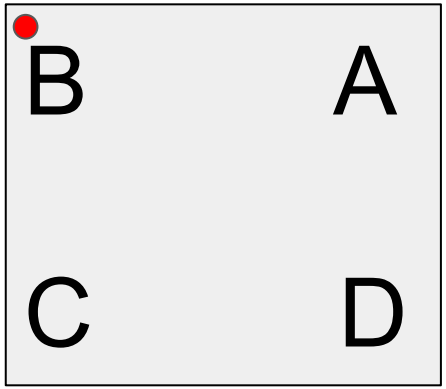
Order 3

MATLAB: order3transform.mat

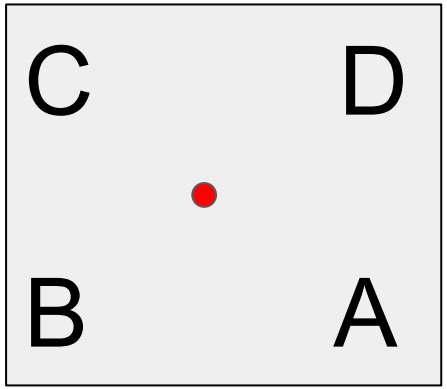
Order #3
Participant #24



Transforming Order #3



Original



STEP 1

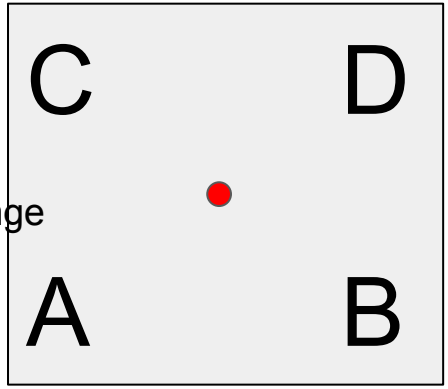
Center the origin

- Subtract 320 from all X coordinates
- Subtract 240 from all Y coordinates

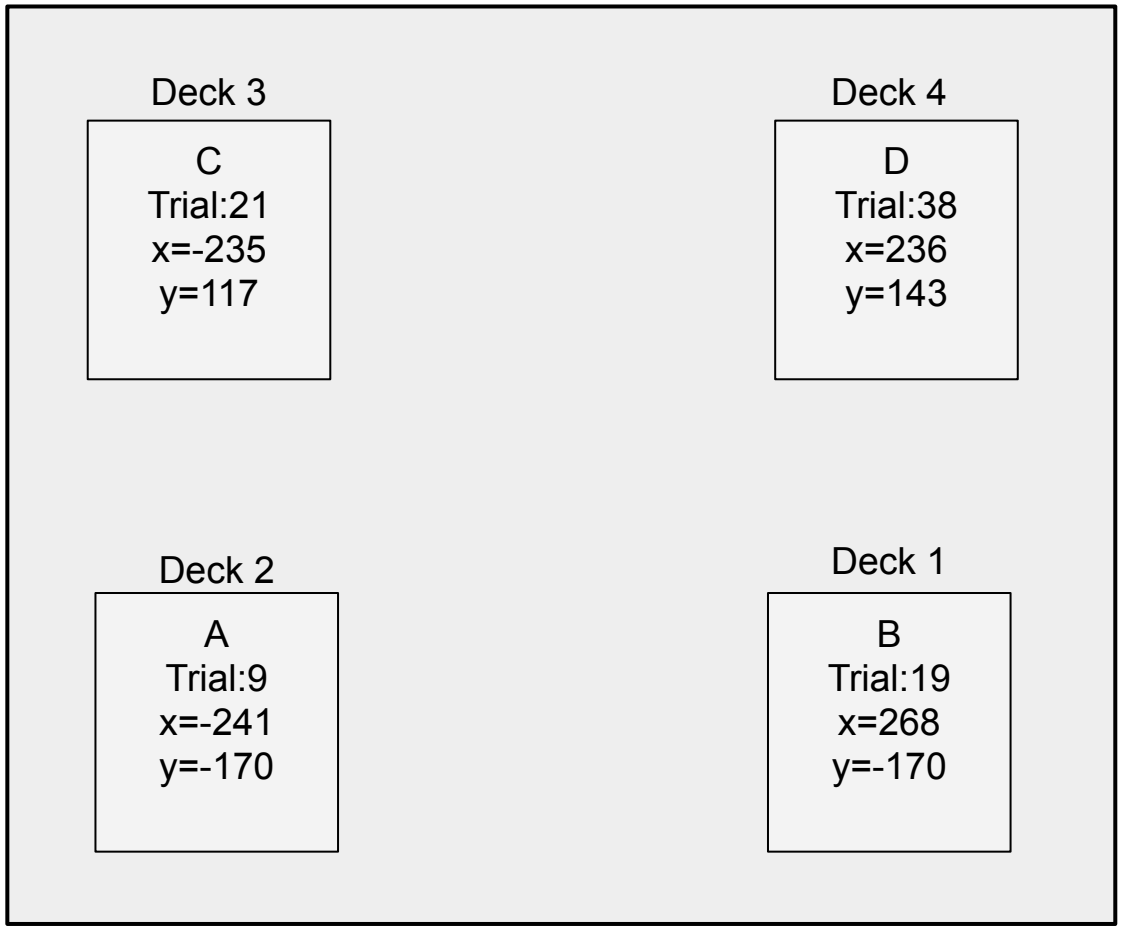
STEP 2

Flip A and B

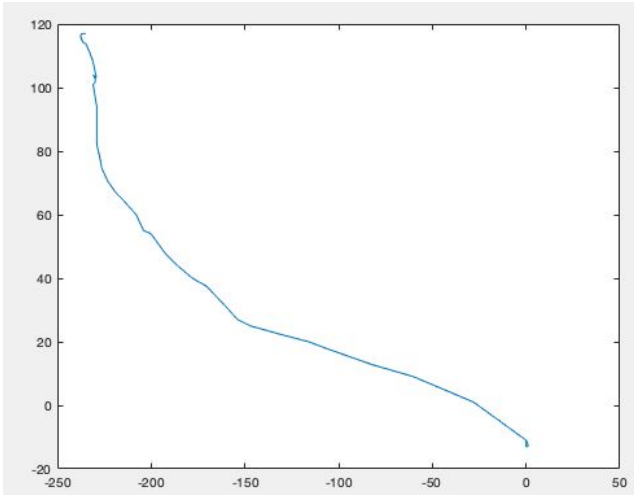
- If y-coordinate <0 change the sign of the x-coordinate

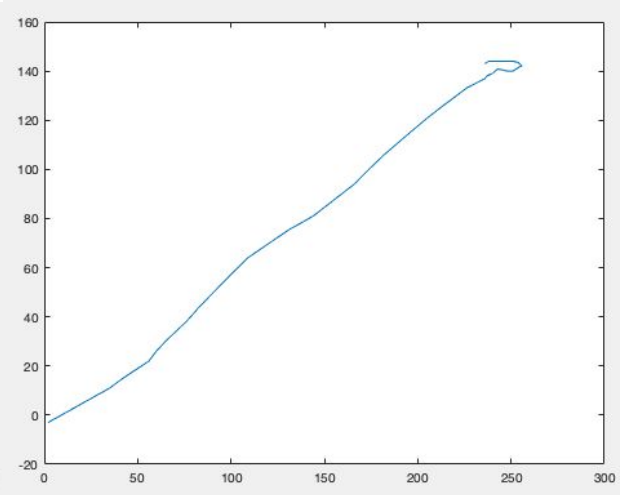


Order #3
Participant #24



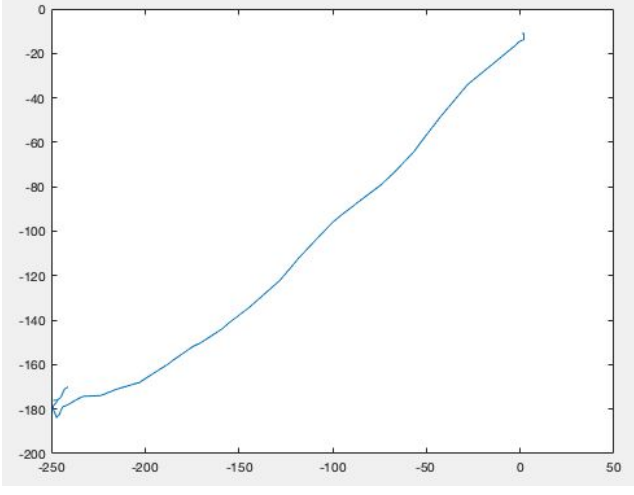
C
Trial:21
x=-235
y=117

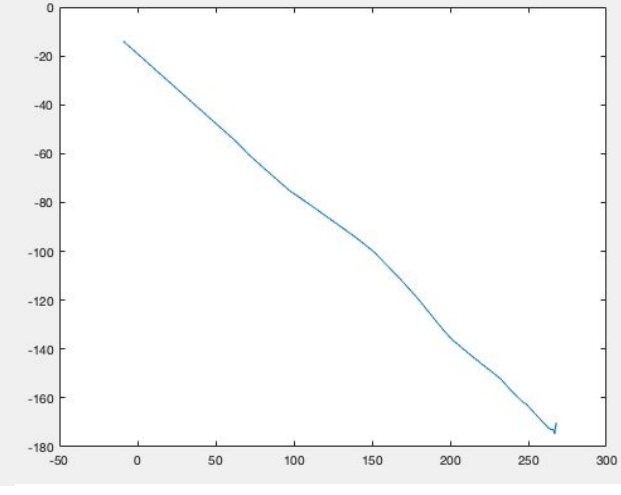




D
Trial:38
x=236
y=143

A
Trial:9
x=-241
y=-170



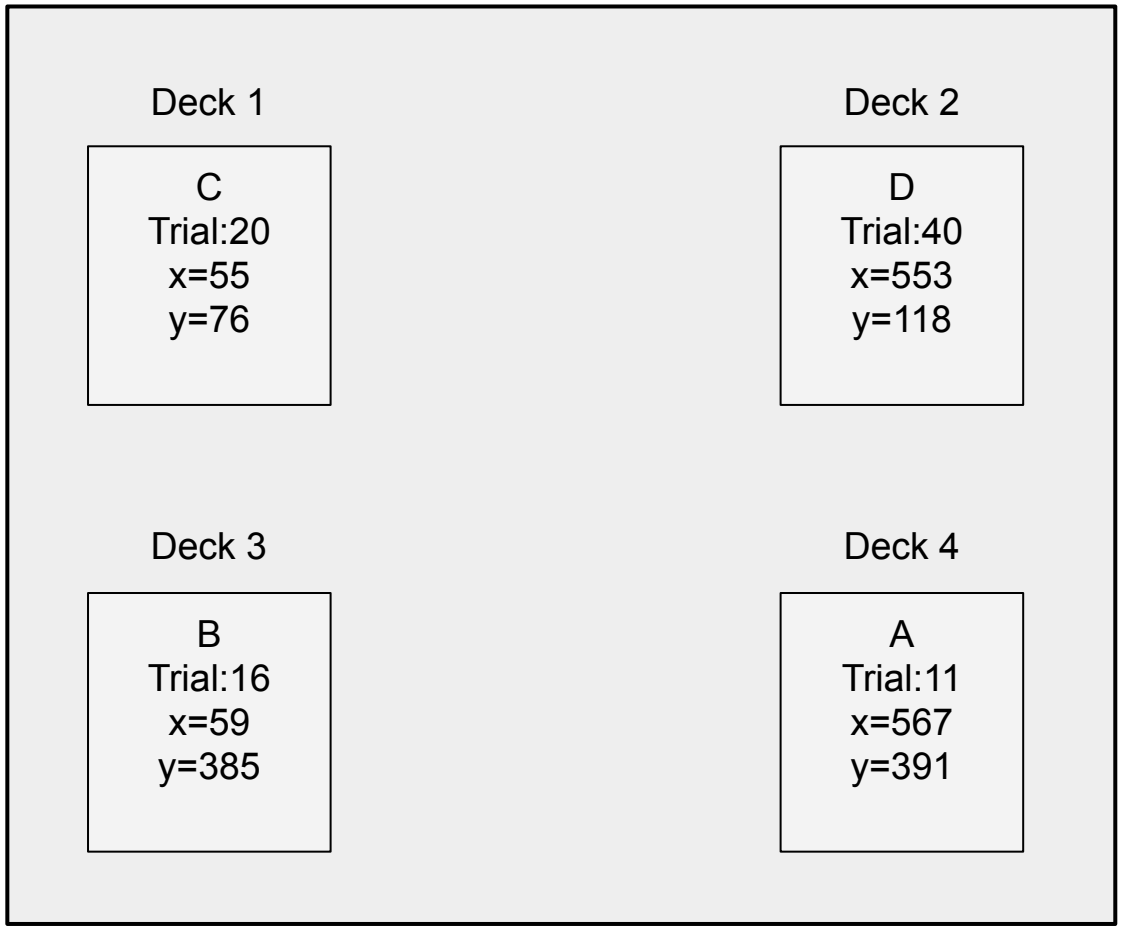


B
Trial:19
x=268
y=-170

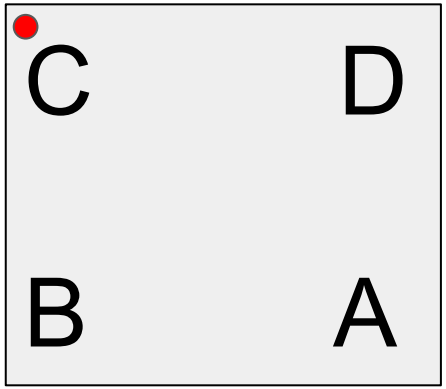
Order 4

MATLAB: order4transform.mat

Order #4
Participant #25



Transforming Order #4

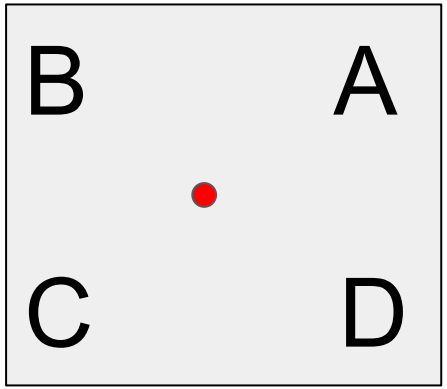


Original

STEP 1

Center the origin

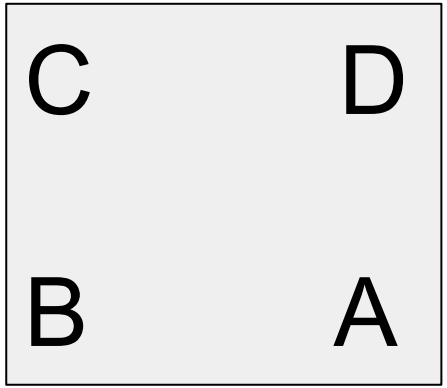
- Subtract 320 from all X coordinates
- Subtract 240 from all Y coordinates



STEP 2

Flip over x-axis

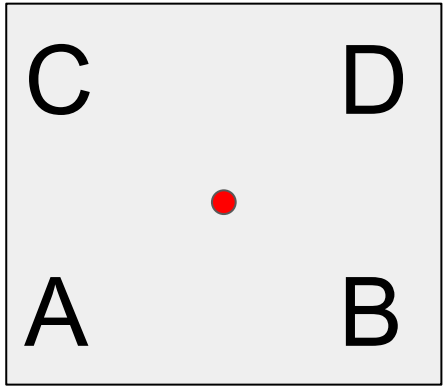
- Change the sign of all y-coordinates



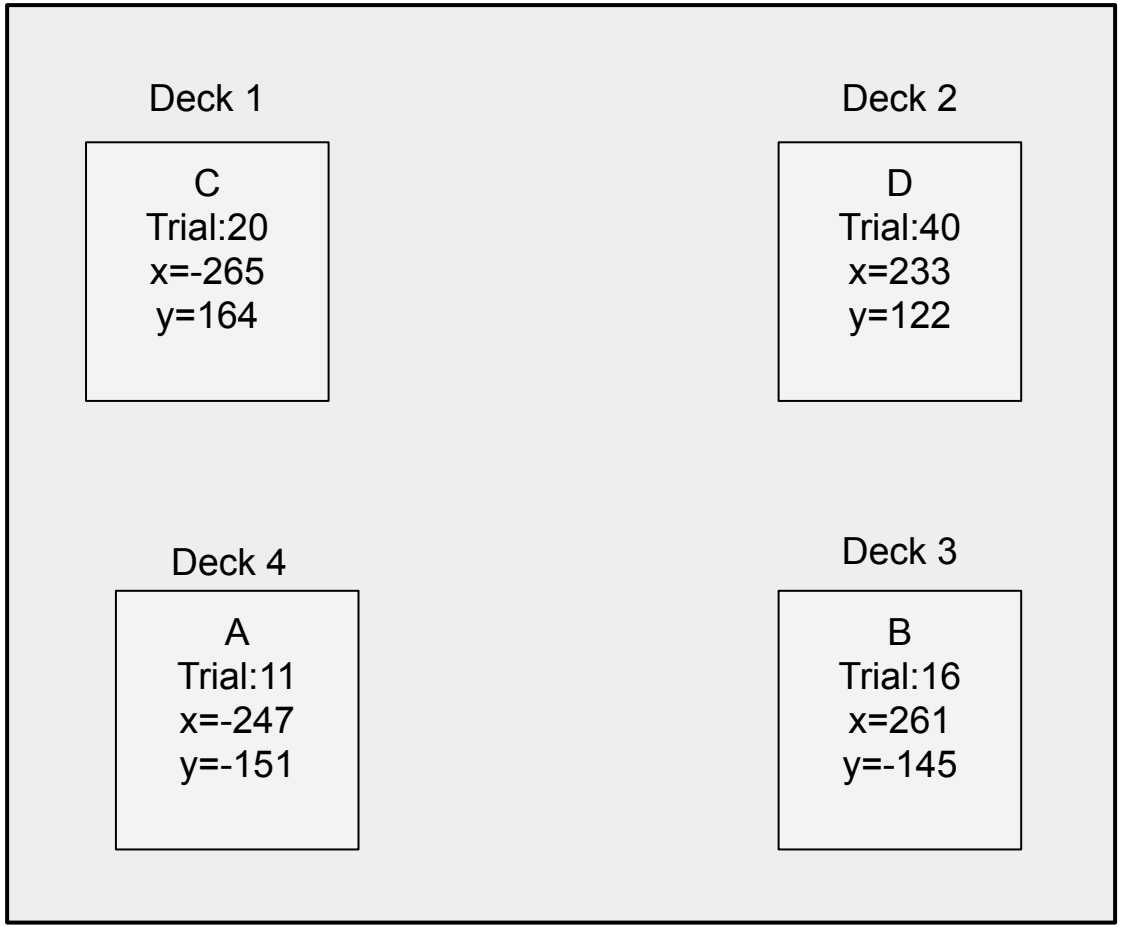
STEP 3

Flip A and B

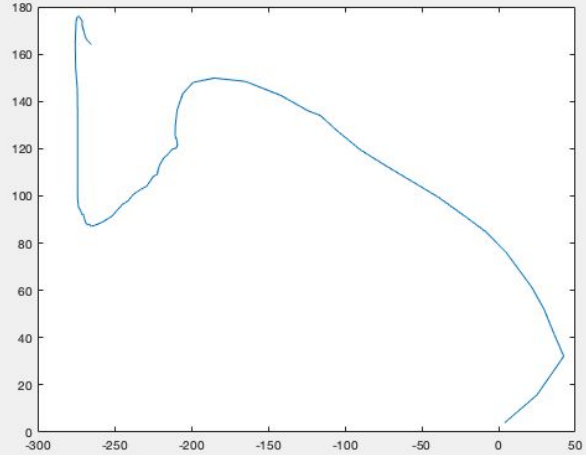
- If y-coordinate < 0 change the sign of the x-coordinate

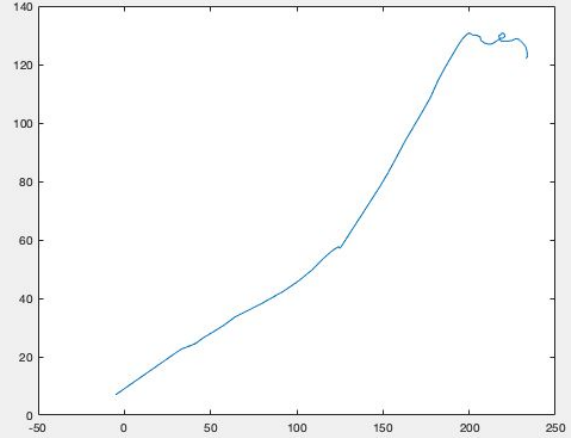


Order #4
Participant #25



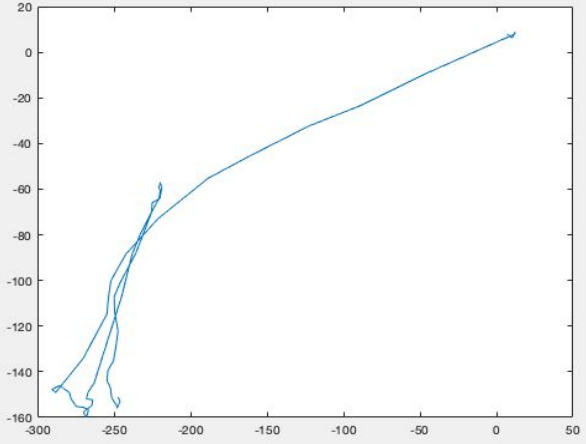
C
Trial:20
x=-265
y=164

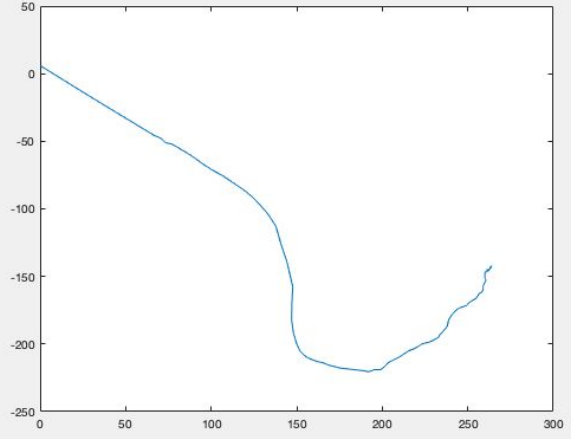




D
Trial:40
x=233
y=122

A
Trial:11
x=-247
y=-151





B
Trial:16
x=261
y=-145