

```
1 C:\Users\sebbe\AppData\Local\Microsoft\WindowsApps\python.exe C
:/Users/sebbe/Desktop/MED3-local/MTA20334-3rd-Semester-Project-
Program/HandTracking/DataSetManager.py
2 Image Directory:
3 FeatureImages/B
4 Save Path:
5 Binarized_Pictures/Binarized_B
6 +-----+
7 | Image Loop Started.
8 | Directory: FeatureImages/B
9 | Save Path: Binarized_Pictures/Binarized_B
10 +-----+
11 | Images in Directory: 10
12 +-----+
13 10%|██████| 1/10 [00:31<04:47, 31.96s/it]The gesture is: B
14 The gesture is: B
15 30%|███████| 3/10 [02:31<05:04, 43.54s/it]The gesture is: B
16 The gesture is: A
17 50%|████████| 5/10 [03:35<03:08, 37.63s/it]The gesture is: B
18 The gesture is: B
19 70%|█████████| 7/10 [04:39<01:43, 34.65s/it]The gesture is: B
20 The gesture is: B
21 90%|██████████| 9/10 [07:00<00:52, 52.66s/it]The gesture is: B
22 The gesture is: B
23 100%|███████████| 10/10 [08:09<00:00, 48.92s/it]
24 +----- Test Results -----+
25 Images tested: 10
26 Execution time: 500.99 seconds
27 +----- Compactness -----+
28 Elements in Compactness [73, 70, 73, 62, 63, 64, 71, 72, 76, 67]
29 Avg. Compactness 69.1
30 Min 62
31 Max 76
32 +----- Aspect Ratio -----+
33 Elements in Aspect Ratio [2.236220472440945, 2.2051282051282053, 2.
1722054380664653, 1.478589420654912, 1.8266331658291457, 1.
```

```

33 8865030674846626, 1.978319783197832, 1.8912855910267472, 2.
    209062821833162, 1.983890954151177]
34 Avg. Aspect Ratio 1.9867838919813257
35 Min 1.478589420654912
36 Max 2.236220472440945
37 +----- Projection Histogram -----+
38 Elements in Max Height [0.4524236983842011, 0.4433333333333336, 0.
    45874125874125876, 0.6025408348457351, 0.4978601997146933, 0.
    5091514143094842, 0.4924137931034483, 0.5141552511415525, 0.
    4580552907530982, 0.46591661151555264]
39 Elements in Horizontal Ratio [559.1929133858267, 560.4395604395604,
    550.8308157099698, 353.9168765743073, 449.13316582914575, 470.
    10736196319016, 501.0162601626016, 481.8377911993098, 550.
    9680741503605, 477.453531598513]
40 Elements in Vertical Ratio [113.13380281690141, 112.67441860465117,
    116.32823365785814, 144.22487223168653, 122.414030261348, 126.
    8780487804878, 124.70547945205479, 130.98996350364965, 114.
    24475524475524, 112.12991880074954]
41 Elements in Max Height Diff [1.2173913043478262, 1.2975609756097561,
    1.3067729083665338, 1.2342007434944238, 1.2830882352941178, 1.
    176923076923077, 1.3522727272727273, 1.33570581257414, 1.
    2578534031413613, 1.193220338983051]
42 +----- Data Sets -----+
43 Compactness Dataset [73, 70, 73, 62, 63, 64, 71, 72, 76, 67]
44 Aspect Ratio Dataset [2.236220472440945, 2.2051282051282053, 2.
    1722054380664653, 1.478589420654912, 1.8266331658291457, 1.
    8865030674846626, 1.978319783197832, 1.8912855910267472, 2.
    209062821833162, 1.983890954151177]
45 Histogram Max Height Relation Dataset [0.4524236983842011, 0.
    4433333333333336, 0.45874125874125876, 0.6025408348457351, 0.
    4978601997146933, 0.5091514143094842, 0.4924137931034483, 0.
    5141552511415525, 0.4580552907530982, 0.46591661151555264]
46 Histogram Hori Dataset [559.1929133858267, 560.4395604395604, 550.
    8308157099698, 353.9168765743073, 449.13316582914575, 470.
    10736196319016, 501.0162601626016, 481.8377911993098, 550.
    9680741503605, 477.453531598513]

```

```
47 Histogram Vert Dataset [113.13380281690141, 112.67441860465117, 116.
    32823365785814, 144.22487223168653, 122.414030261348, 126.
    8780487804878, 124.70547945205479, 130.98996350364965, 114.
    24475524475524, 112.12991880074954]
48 Histogram Max Height Diff Dataset [1.2173913043478262, 1.
    2975609756097561, 1.3067729083665338, 1.2342007434944238, 1.
    2830882352941178, 1.176923076923077, 1.3522727272727273, 1.
    33570581257414, 1.2578534031413613, 1.193220338983051]
49 +----- Standard Deviance -----+
50 C, A, HMHRD, HHD, HVD, HMDDD [0.002937373653800309, 0.
    04313208193355686, 0.04409414333616626, 0.27686274366932223, 0.
    03443227957035472, 0.04359540943723747]
51 average 0.04212978834963116
52 average 0.001211328290385379
53 average 0.00029841984338987396
54 average 0.3020965767909238
55 average 0.07424375442442424
56 average 0.0007715658904449706
57 +-----+
58
59 Process finished with exit code 0
60
```