C:\Users\whitn\Anaconda2\envs\ml4qs2\python.exe C:/Users/whitn/OneDrive/Documenten/Groupwork\_TommyErik/ML4QS/ML4QS-master/PythonCode/crowdsignals\_ch5\_gym.py

C:/Users/whitn/OneDrive/Documenten/Groupwork\_TommyErik/ML4QS/ML4QS-master/PythonCode/crowdsignals\_ch5\_gym.py:34: FutureWarning: to\_datetime is deprecated. Use pd.to\_datetime(...)

dataset.index = dataset.index.to\_datetime()

===== kmeans clustering =====

running for acc\_phone\_x

k = 2

silhouette = 0.54500749553

k = 3

silhouette = 0.542205392263

k = 4

silhouette = 0.551804824783

k = 5

silhouette = 0.505753387884

k = 6

silhouette = 0.498663521086

k = 7

silhouette = 0.493994583257

k = 8

silhouette = 0.458784616566

k = 9

silhouette = 0.369623789747

The highest average silhouette score is 0.551804824783

which you get from k = 4

running for gyr\_phone\_x

k = 2

silhouette = 0.477170458031

k = 3

silhouette = 0.447858179897

k = 4

silhouette = 0.488832942108

k = 5

silhouette = 0.401503268255

k = 6

silhouette = 0.417025570464

k = 7

silhouette = 0.407180566146

k = 8

silhouette = 0.381656958807

k = 9

silhouette = 0.421607088542

The highest average silhouette score is 0.488832942108

which you get from k = 4

running for mag\_phone\_x

k = 2

silhouette = 0.411545579242

k = 3

silhouette = 0.432058995468

k = 4

silhouette = 0.457109979045

k = 5

silhouette = 0.488309092819

k = 6

silhouette = 0.459964482117

k = 7

silhouette = 0.412561731771

k = 8

silhouette = 0.401029913453

k = 9

silhouette = 0.40095639511

The highest average silhouette score is 0.488309092819

which you get from k = 5

Process finished with exit code 0