This is a demo code for Persian sign language recognition using hidden Markov models (HMMs). These codes implement the methodology used in [1] for a set of 8 signs as examples.

Note: To run these codes, you need to first download Kevin Murphy's HMM toolbox from the link below:
https://www.cs.ubc.ca/~murphyk/Software/HMM/hmm.html

This demo contains two sub-folders. The first one, "1- trj extraction", contains a sample video of the dataset and the codes to extract the trajectories. The second one, "2- sign classification" contains the normalized trajectories of 8 sample signs and the codes to classify them.

For more information about our dataset refer to the link below:

https://asatid.tabrizu.ac.ir/Files/603_122fa2a0-989c-4124-b2f6-dfe2b5eb03ff.pdf

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If you find the codes useful please cite:

[1] S. G. Azar, H. Seyedarabi, Trajectory-based recognition of dynamic Persian sign language using hidden Markov model, Computer Speech & Language (2019) 101053 (2019).