To train the model with diffBehavioral cloning

1. Udacity self driving car powered by -
2. We train the data by manually driving it through the tracks as it recordes the borders, steering angle and other behaviors, then after sufficient data has been captures we drive in the opposite direction to train the model with different training angles
3. What are we recording?
   1. Car is equipped with 3 cameras, one on the left, right and middle, for each image captured it calculates the steering angle, speed throttle and breaking.
4. Once the recording is done we obtain 2 things:
   1. **IMG folder**:images of every frame in the recording
   2. **Driving_log.csv**: a csv file that contains log of the recorded images from the 3 cameras. Each photo corresponds to a throttle ,break and speed (columns D,E,F). Steering angle has to be predicted., column D acts as labels for training
5. Ar has to predict the steering angle based on which part of the track it was on.
6. Steering angle (column D) goes from -1 to 1 rad. 0 means that it goes straight, when curveture it is -ve or +ve (left turn -ve) and (right turn +ve).
7. In the autonomous mode when the car starts at a random position in the track, based on the features extracted at that location it sees whether it is a curved or straight road, border type.
8. It is a regression problem as we are predicting the steering angle based on a continuous spectrum.
9. The images are captured from a camera perspective from 3 different angles (point 3) this was proposed by Nvidia