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| **Experiment 5** | |
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| **Problem Statement** | Filter the Audio Signal Captured in the presence of noise and improve the quality of sound |
| **ALGORITHM:** | 1. Record Audio in the presence of noise with Fs = 8000 Hz==> x[n].  2. Play the recorded signal x[n] and observe the quality of sound.  3. Design FIR Low Pass Filter using MATLAB filter design Tool.  Take Fpass = 2000Hz. Fstop = 3000Hs Fs = 8000  4. Filter the audio signal x[n]  i.e. Perform Linear Convolution of x[n] and h[n] using either OAM/OSM based on FFT ==>. y[n]  5. Play the filtered signal y[n] and observe the quality of sound |
| **RESULT:** |  |