A digital watermarking technique applying psychoacoustic model for audio signal is proposed in this paper. In the watermarking scheme, the pseudo-random bit stream used as a watermark signal is embedded into the audio signal in both speech and music. The strength of the embedded signal is subject to the human auditory system in such a way that the disturbances on host audio signal are beyond the sensing of human ears. The experimental results show that the quality of the watermarked audio signal, in term of signal to noise ratio, can be improved up to 3.2 dB