

## **Assignment 2: Video coding**

Input: Video file (xylophone1.avi)

Coding Environment: Matlab/Python without using built-in libraries.

This is a programming assignment which requires you to implement the following:

- Read data from avi file.
- Extracts Luminance, Chrominance, Chrominance Component.
- Perform MPEG coding technique using Discrete Cosine Transform (DCT) and Motion-compensated interframe prediction. (partitioning into macroblocks, transformation, quantization and Zig-zag Scan.)
- Display PSNR value versus Bitrate curves of Original and Reconstructed frames.

You need to upload the following:

- A zip folder (name as: first name\_second name\_assignment 2) including a pdf file containing source code with results (include intermediate outputs).
- Compressed video