ECE 5354/6354 Fall 2016 HW 9 due 11/08

Problem 1. H.261

Encode the 1st MB of the following "current" frame according to the H.261 standard beginning with a PSC.

1) Use an MTYPE for Intra-MBs with no MQUANT.
2) Use an GQUANT value of 16 so that you are dividing by (2)(16)=32.

The 1st MB of the "current" frame to be encoded is defined as
All Y1 pixels = 100
All Y2 pixels = 190
All Y3 pixels = 100
All Y4 pixels = 190
All Cb pixel = 128
All Cr pixels = 128

Problem 2. H.261 Encode the first two MBs (MB1, MB2) of the following "current" frame according to the H.261 standard, beginning with a PSC.

1) Use an MQUANT value of 8 so that you are dividing by (2)(8)=16.
2) Use Motion-Vector-Data (MVD), a coded-block-pattern (CBP) (with Y1, Y2, Y3, Y4, but no Cb or Cr) and TCOEFFs. Use no loop-filter.

Since you are using MVD, you'll also need the "previous" decoded frame listed below (numbered according to Fig.7.3 in H.261 handout)

MB1 of the "current" frame	**MB2 of the "current" frame**
All Y1 pixels = 80	All Y1 pixels = 120
All Y2 pixels = 200	All Y2 pixels = 150
All Y3 pixels = 80	All Y3 pixels = 120
All Y4 pixels = 200	All Y4 pixels = 150
All Cr and Cb pixels = 128	All Cr and Cb pixels = 128

MB1 of previous frame	**MB2 of previous frame**	MB12 of previous frame	MB13 of previous frame
All Y1 pixels = 30	All Y1 pixels = 180	All Y1 pixels = 50	All Y1 pixels = 180
All Y2 pixels = 100	All Y2 pixels = 130	All Y2 pixels = 50	All Y2 pixels = 180
All Y3 pixels = 30	All Y3 pixels = 180	All Y3 pixels = 50	All Y3 pixels = 180
All Y4 pixels = 100	All Y4 pixels = 130	All Y4 pixels = 50	All Y4 pixels = 180
All Cr and Cb pixels = 128	All Cr and Cb pixels = 128	All Cr and Cb pixels = 128	All Cr and Cb pixels = 128