1.   Develop an I/O port decoder, using a 74ALS138 that generates low-bank I/O strobes, for a 16-bit microprocessor, for the following 8-bit I/O port addresses: 10H, 12H, 14H, 16H, 18H, 1AH, 1CH, and 1EH.

2.   Develop an I/O port decoder, using a PLD that generates the following high-bank I/O strobes: 300DH, 300BH, 1005H, and 1007H.

3.   Using a PLD, interface an 82C55 to the 8086 so that it functions at I/O locations 0380H, 0382H, 0384H, and 0386H.