Dr. Lama Hamandi   Assignment 3   due 6/10/2014

1) Minimize the following functions to a minimum sum of products and minimum product of sums using Kmaps:

b. $P = v'w' + v'wy' + vw'z$

c. $G = y'z + w'xy' + w'xy + xy'z$

d. $h = f(a, b, c, d) = \pi(2, 3, 4, 6, 7, 10, 11, 12)$

2) Identify the distinguished 1-cells and the Essential prime implicants for:
F(a,b,c,d) = Σ(1,5,7,8,9,10,11,13,15)
Then write F as minimal SOP.

3) Design a combinational circuit that accepts a 4-bit number and generates its triple.