Mechatronics Engineering and Automation Program
CSE473: Computational Intelligence
Lab Assignment #03

Write a Python code to visualize the following functions as contour plots:

1- $F(x,y) = \sin(x)^2+\cos(y)^2$.
2- $G(x,y) = 9/((x-2)^2+(y-4)^2)^{0.5} + 12/((x-5)^2 + (y-2)^2)^{0.5} + 25/((x-4)^2 + (y-5)^2)^{0.5}$
3- $G(x,y) = ((x-2)^2+(y-4)^2)^{0.5}/9 + ((x-5)^2 + (y-2)^2)^{0.5}/12 + ((x-4)^2 + (y-5)^2)^{0.5}/25$

In each case, mark the positions of the local minima/maxima points on the graph.
