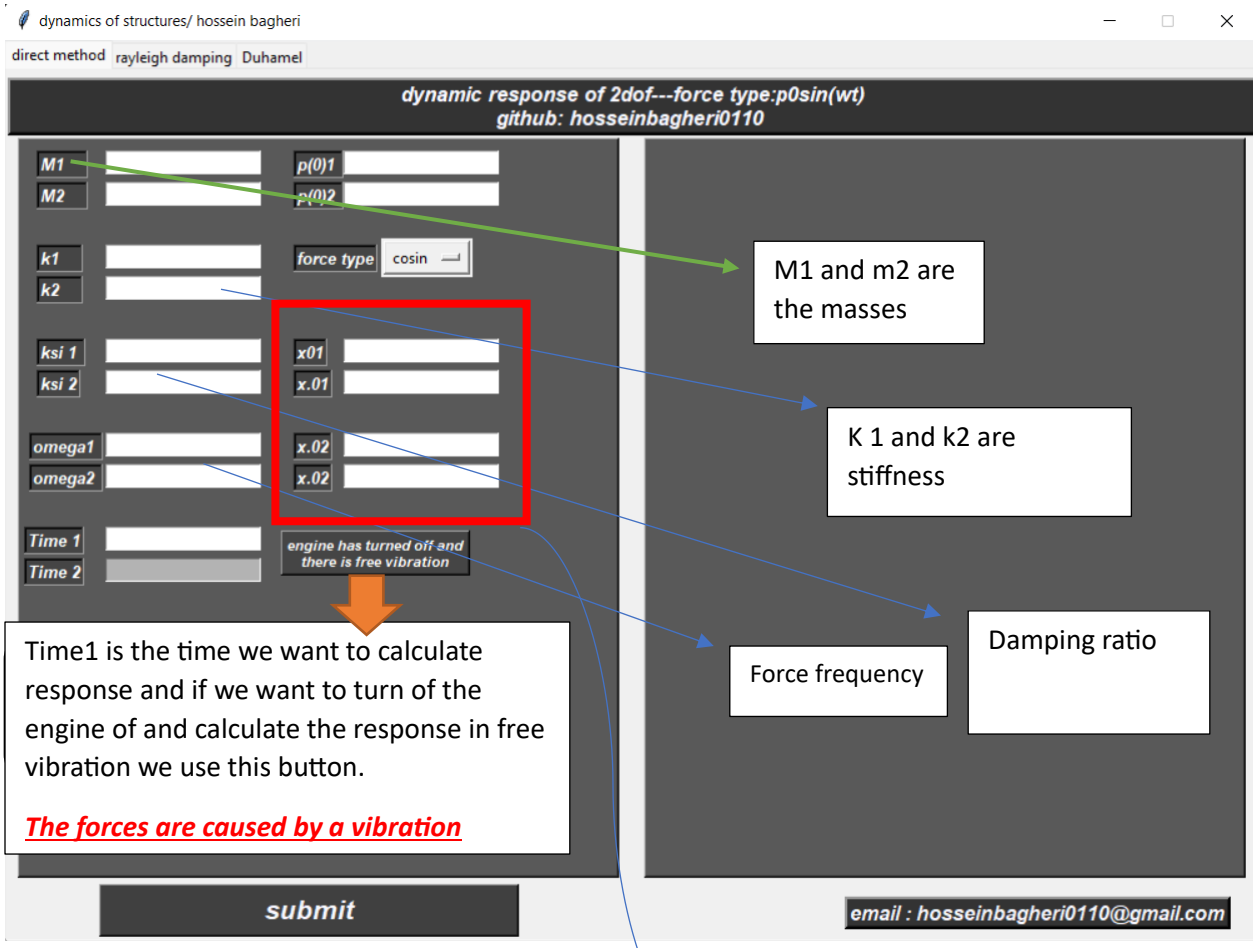
Here is an script to calculate dynamic response of 2dof structure effected by 2 sin /cosine type forces :ex p0*sin(wt)

This program uses Tkinter gui



Boundary conditions :

X01 and x.01 are the initial displacements

For firs dof and the next 2 lines are the same for 2nd dof