```
function plt = plotHorDisp(figName, folder, nNodeColumn, direction, legendName)
  arguments;
     figName = "temp";
     folder = "static_EW_force";
     nNodeColumn = 1;
     direction = "EW";
     legendName = "";
  end

  if direction == "EW"; DOF = 1; elseif direction == "NS"; DOF =2; end

  idx = getMaxDispIdx(folder);
  idx = 657;

  Nstories = 15;

  for wall = [1,2]
     displace = [];
     subplot(1,2,wall); hold on;
     for i = 1:Nstories
        for n = 1:nNodeColumn
           dispNode = load(".\" + folder + "\DeflectedShape\dispNode_" + num2str(1000*i +wall*100 + n) +".txt");
           displace = [displace, dispNode(idx,DOF)];
        end
     end
     height = 16:12/nNodeColumn:184;

     if nNodeColumn == 2
        height = [0, 8 , height];
     else
        height = [0, height];
     end

     plt = plot(abs([0, displace]),height,'-o');
     yticks([0, 16:12:184]);
     ylim([0,184])
     grid on;
     xlabel('Horizontal Displacement [in]');
     ylabel('Story Height [ft]');

     title("Wall "+wall);
     if legendName ~= ""; plt.DisplayName = legendName; legend('location','best'); end

  end
  sgtitle("Horizontal Displacement in the " +direction+" direction",'FontName','Times');
  h = findobj('Type','line'); set(h,'LineWidth',2,'MarkerSize',2,'MarkerFaceColor','none');
  print_figure(figName,[6.5,4.5]);
end
```