1. Create an m file and change the filename to F7xxxxxxx_quiz1.m. Type the main code in the m-file to accomplish the later tasks.

2. Generate a 4 by 20 matrix A. Set the elements of the first raw by $A_{1,j} = j\frac{2\pi}{10}$. Let the 2nd row set to be $A_{2,j} = \cos(A_{1,j})$, the 3rd row $A_{3,j} = \sin(A_{1,j})$, and the 4th row $A_{4,j} = \frac{1}{\sqrt{2}}(A_{2,j} + A_{3,j})$. Then use the function "display" to print out the elements in the 10th column.

3. Insert 'figure(1)' to generate a new figure. Plot $A_{1,j}$ (as x) vs. $A_{2,j}$ (as y) in Figure 1. Name the x-axis as 'Time (s)' and the y-axis 'Amplitude (m)'.

4. Insert 'figure(2)' to generate another new figure. Plot $A_{1,j}$ vs. $A_{2,j}$, $A_{1,j}$ vs. $A_{3,j}$, and $A_{1,j}$ vs. $A_{4,j}$ all in the same figure of Figure 2.