## <u>Visualization 1 - Exercise Instructions for Students</u>

Write a simple random matrix serial code in C and Fortran.

- Add directive to the code that defines the variable for size of the matrices
- Define arrays for each matrix and allocate required memory
- Write for loop(s) to initialize the matrix arrays with some numbers, you could use random number generators. Then place rows/columns of constant values in this array.
- Write loops to convert to ARGB pixels and write to a file for ImageMagik.
- Convert pixels file to a .png file using the display/convert commands.
- Display .png file with ImageMagik.

Build a simple movie file name generation program.

• File name generation in a program needs to be tested by simple code examples in Fortran and C.