

## Homework – Lesson 2

Open the editor and write a script that does the following:

1. Use the *rand* function to build a 2 dimensional matrix named *mat1* with 10 values in the first and second dimension.
2. Extract the value in the 3 row, and 9 column of the matrix
3. Use the *mean* function to create a vector named *vec1*, which contains the mean across all rows.
4. Create a new matrix named *mat1\_squared*, which contains the squared values of *mat1*.
5. Open matlab help and find the function that allows you to compute the square root. Use this function to compute the square root of *mat1\_squared*.
6. Use the save command to save all of the matrices you created in a file named *homework1.mat*
7. Save all of the code that you wrote in a file named *Firstname\_Lastname\_Lesson#.m*
8. Close Matlab and reopen it. Load both .m and .mat files that you saved.
9. Use the *rand* function to build another 2 dimensional matrix named *mat2* with 10 values in the first and second dimension.
10. Open a figure and use the “scatter” function to display a scatter plot of the values in *mat1* versus the values in *mat2*.
11. Save the .m file you created again.