

1. Develop a script which will produce the following output by assuming real variables  $a=2.7867$ ,  $b=58.9346$ , and a character variable  $str1='MARMARA'$ ,  $str2='Class of 2022'$ .

```
2.786700  5.893e+01
MARMARA
Class of 2022
```

2. Write a program to generate a table containing the sine and cosine of angles between 0 and 180 degrees in 1 degree increments. Then save the table in a file called 'sincos.txt'. The program should properly label each column in the table and the results will be printed with three digits after decimal point. The file should look like this
3. Use a text editor to create a file, 'test1.txt', containing the following data. Then use the load function to load the file into MATLAB, and compute the mean value of each column.

```
55  42  98
51  39  95
63  43  94
58  45  90
```

4. Write a Matlab function which will create n random numbers between a num\_min and num\_max values and writes to a data file named data.txt. Write another function which receives a file name (string) as input and read a set of numbers from that file. Then the function would calculate the mean, median and the standard deviation of the data set. The function should also print out the numbers, and their mean, median and standard deviation into a text file. The output file should look like this. Develop a script which prompts the user to specify the lower and upper bounds of the random numbers along with the number of random numbers between those bounds and then calls these functions to perform the create the output below

```
Numbers
1.2340
...
...
...
Mean: .....
Median: ...
Standard Deviation: ...
```

5. Use fprintf to create the multiplication tables from 1 to 13 for the number 6.

Your table should look like this.

```
1 times 6 is 6
2 times 6 is 12
3 times 6 is 18
...
```