

2PEM-100A

PRACTICE 1_1

First steps using matlab

More information:

- <https://2pem100a.blogspot.com/>

More examples:

- https://github.com/vasanza/Matlab_Code/tree/Electrical-Systems-Simulation

Dataset:

- <http://ieee-dataport.org/8630>

Example 1:

```
clear;clc;  
A=[1 2 3 4]
```

```
A = 1×4  
    1    2    3    4
```

Example 2:

```
clear;clc;  
A=[1 2 3 4];  
B=[5 6 7 8];  
C=A+B
```

```
C = 1×4  
    6    8   10   12
```

Example 3: Generating random data

```
clear;clc;  
N=1000;%Numero de ejemplos  
A=240;%valor de amplitud  
  
rng('default')  
data = rand(N,1)*A;  
size(data)
```

```
ans = 1×2  
    1000         1
```

Example 4: Statistical information of the data

```
max(data)
```

```
ans = 239.8780
```

```
min(data)
```

```
ans = 0.1254
```

```
datastats(data)
```

```
ans = struct with fields:  
    num: 1000  
    max: 239.8780  
    min: 0.1254  
    mean: 117.3198  
    median: 117.4587  
    range: 239.7526  
    std: 67.9781
```

Example 5: Graphing data

```
plot(data)
```

