

Exercise: Data Analysis

Load the data from the Data.mat file.

```
load( "Data.mat" )
```

The two matrices X and Y have the dimensions 100×10 . The columns $X(:,n)$, $Y(:,n)$ contain data that should be fitted using a linear fit. X contains the x values and Y contains the corresponding function values.

Use the function `polyfit` to make the linear fit and save the parameters to the preallocated variable `p`.

```
p=zeros(10,2);  
% Implement a loop structure to fit the individual columns of X and Y  
  
for n=1:10  
    p(n,:)=polyfit(X(:,n),Y(:,n),1);  
end
```

```
p
```

```
p = 10x2  
    9.0012    6.9600  
    2.0031    3.8623  
    2.0000    8.8707  
    6.0012    7.0148  
    6.9994    6.0189  
    1.9993   19.0143  
    6.9961    7.7969  
    9.0045    8.0824  
    8.0041   12.1197  
    3.0000    2.0203
```