

## TP N° 2

### Exercice 1:

1. Tapez les commandes suivantes:

```
>> ch1='Département de Génie Electrique'
>> ch2='situé au 2ème étage du bloc'
>> ch3=[ch1,' ',ch2]
>> ch1(2)
>> ch1(0)
>> ch1(-3)
>> ch1(12)
>> ch2(20)
>> ch1(3:7)
>> ch1(4:3:16)
>> [ch2(1),ch2(13),ch2(2),ch1(7),ch1(10),ch2(13),ch1(7),ch2(1)]
```

2. Utiliser ch1 et ch2 pour former le mot « matlab »

### Exercice 2:

Tapez les commandes suivantes:

a)-

<pre>&gt;&gt; v1= [4 10 -2 5 7] &gt;&gt; v11= [4,10,-2,5,7,1] &gt;&gt; v2= [3;2;5;1;-2] &gt;&gt; v22= [3           2           5           1           -4           -2]</pre>	<pre>&gt;&gt; v1(2) &gt;&gt; v1(0) &gt;&gt; v1(-3) &gt;&gt; v1(6) &gt;&gt; v1(end) &gt;&gt; v1+v4 &gt;&gt; v2-v3 &gt;&gt; v1*v2 &gt;&gt; v3*5 &gt;&gt; v4/2 &gt;&gt; v5 = [v1,v4] &gt;&gt; v6 = [v2;v3] &gt;&gt; x = length(v5) &gt;&gt; v5(2)=-3 &gt;&gt; v5([2,5,8]) &gt;&gt; v5(7) = [ ]</pre>
<pre>&gt;&gt; v3 = v1' &gt;&gt; v4 = v2' &gt;&gt; v1^2 &gt;&gt; v1.^2 &gt;&gt; v1.*v4 &gt;&gt; v1./v4 &gt;&gt; v1+4 &gt;&gt; v2-3 &gt;&gt; v1+v11 &gt;&gt; v2+v22</pre>	

### Exercice 3:

Tapez les commandes suivantes:

<pre>&gt;&gt; n=11 ;v1=1:n &gt;&gt; v2=3:2:n &gt;&gt; v3=n:-1:5 &gt;&gt; v4=n:-3:2</pre>	<pre>&gt;&gt; v5=ones(1,6) &gt;&gt; v6=ones(4,1) &gt;&gt; v7=zeros(1,6) &gt;&gt; v8=zeros(4,1)</pre>
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#### Exercice 4:

Tapez les commandes suivantes:

```
>>A = [1 3 4;5 6 8]
```

```
>>B = [-2 5  
       7 9]
```

```
>> A'
```

```
>> [n,m]=size(A)
```

```
>> x = size(A)
```

```
>> A(1,3)
```

```
>> A(1,:)
```

```
>> A(:,2)
```

```
>> A(2,3) = -0.2
```

```
>> A(:,2) = [11;-3]
```

```
>> A(1,:) = [2,-1,6]
```

```
>> A(:,3) = [ ]
```

```
>>A+B
```

```
>>A-B
```

```
>>A*B
```

```
>> A.*B
```

```
>> A^2
```

```
>> A.^2
```

```
>> A+5
```

```
>> A-3
```

```
>> A*6
```

```
>>A/4
```