

## Exercice 3.4.2 - Solution :

```
import matplotlib.pyplot as plt  
import numpy as np
```

```
X = np.arange(0, 5, 0.1)
```

```
def f(X):  
    return 2*X + 1
```

```
def J(X):  
    return X**2 - 4*X + 5
```

```
plt.figure()
```

```
plt.subplot(2,2,1)  
y1 = f(X)  
plt.plot(X, y1, c='green')
```

## Exercice 3.4.2 - Solution :

```
plt.subplot(2,2,2)
```

```
y2 = J(X)
```

```
plt.plot(X, y2, c='red')
```

```
plt.subplot(2,2,3)
```

```
y3 = np.sin(X)
```

```
plt.plot(X, y3, c='green')
```

```
plt.subplot(2,2,4)
```

```
y4 = np.cos(X)
```

```
plt.plot(X, y4, c='red')
```

```
plt.show()
```