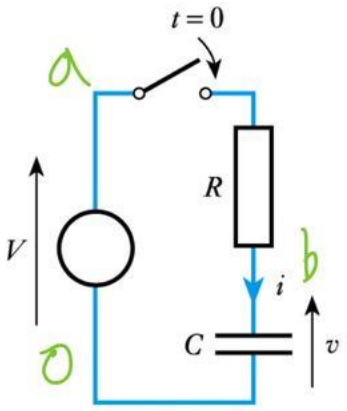
1. RC 電路充電

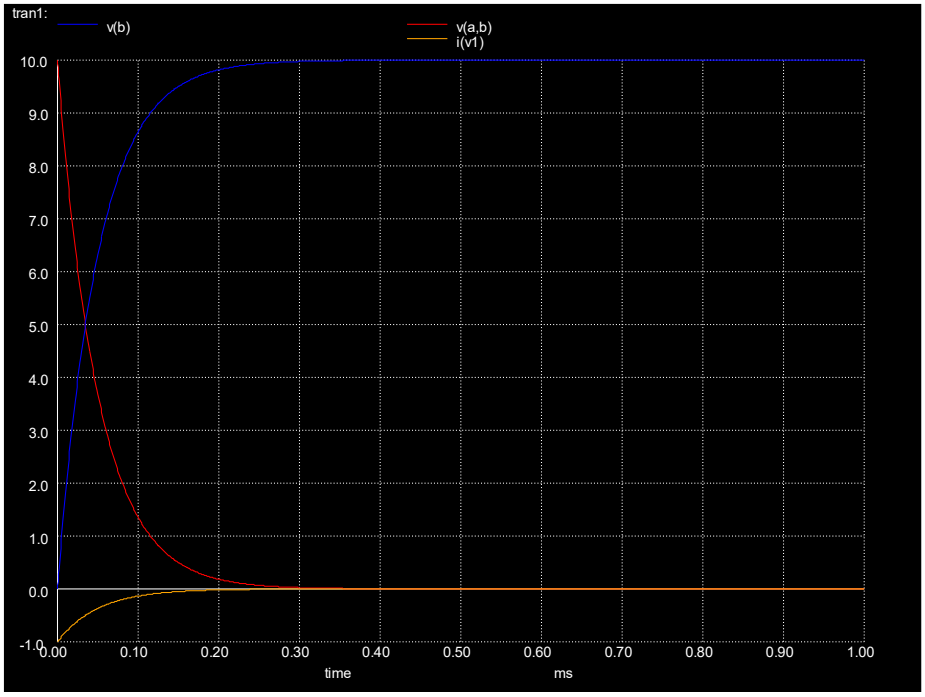
(1) 電路圖



(2) 程式碼

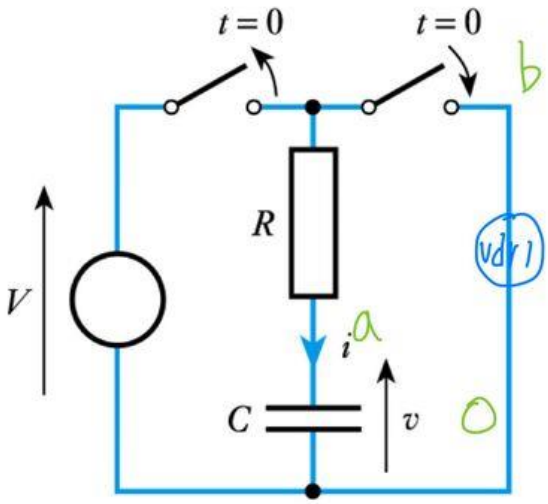
```
v1 a 0 dc 10
r1 b a 10
c1 b 0 5u ic=0
.dc v1 10 10 1
.tran 1u 1000u uic
.plot tran  v(a,b) v(b) i(v1)
```

(3) 圖片



2. RC 電路放電

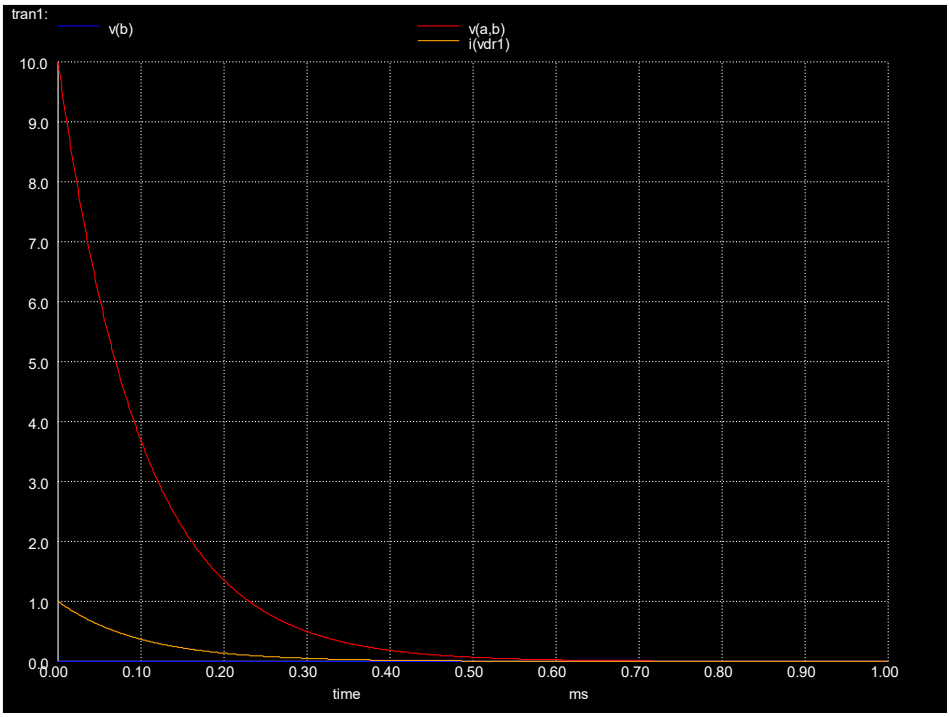
(1) 電路圖



(2) 程式碼

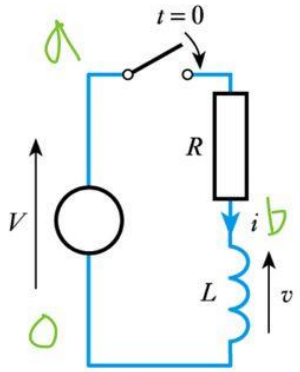
```
vdr1 b 0 dc 0
c1 a 0 10u ic=10
r1 a b 10
.tran 1u 1000u uic
.plot tran  v(a,b) v(b) i(vdr1)
```

(3) 圖片



3. RL 電路充電

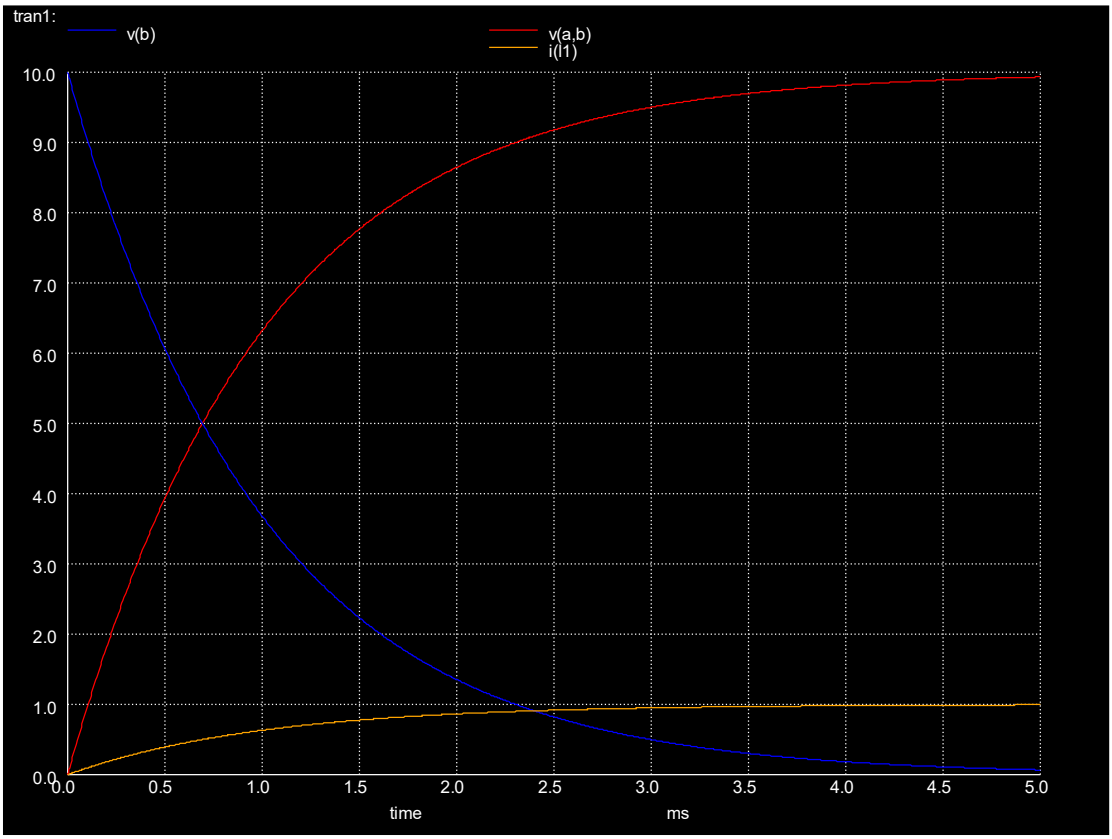
(1) 電路圖



(2) 程式碼

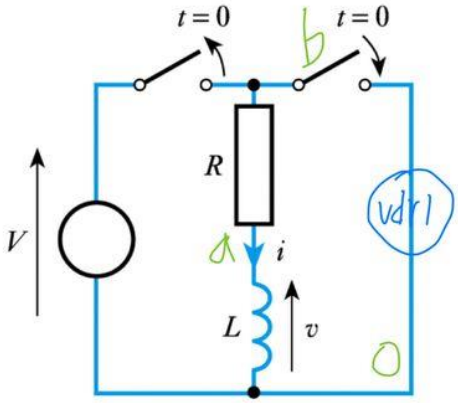
```
v1 a 0 dc 10
r1 b a 10
l1 b 0 10m ic=0
.dc 10 10 1
.tran 5u 5m uic
.plot tran v(a,b) v(b) i(l1)
```

(3) 圖片



4. RL 電路放電

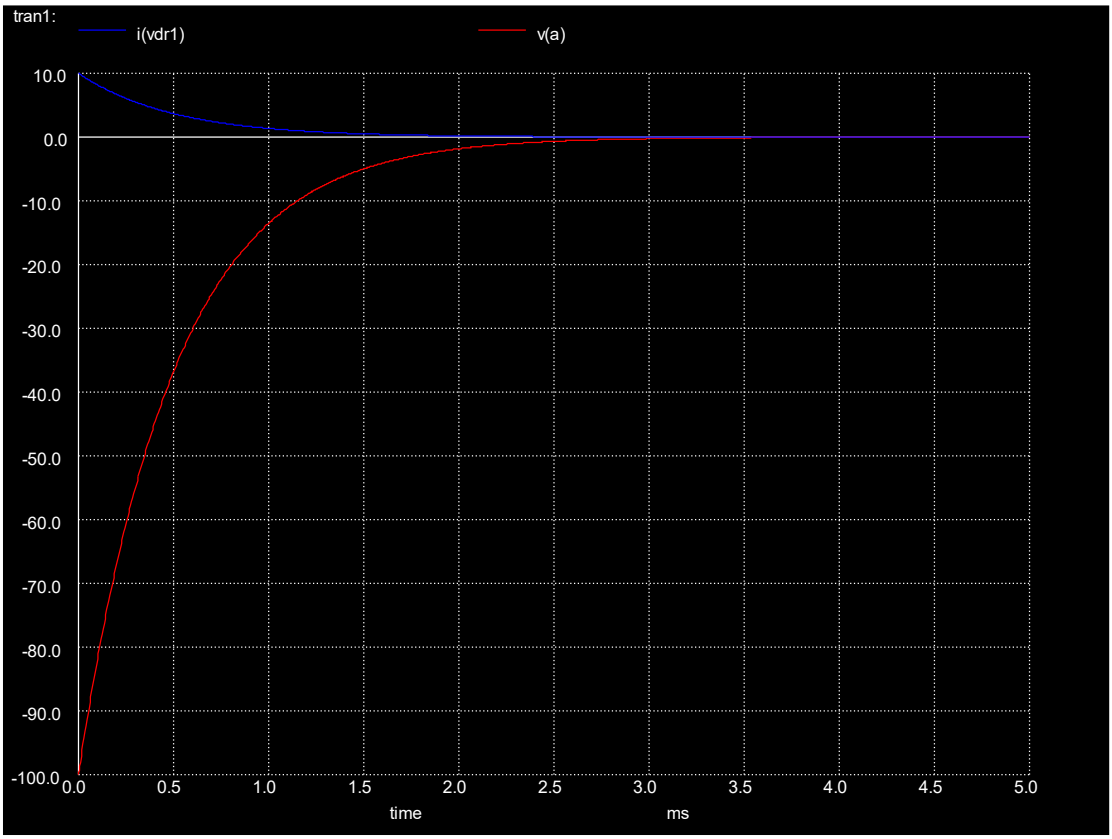
(1) 電路圖



(2) 程式碼

```
vdr1 0 b dc 0
r1 b a 10
l1 a 0 5m ic=10
.tran 5u 5m uic
.plot v(a) i(vdr1)
```

(3) 圖片



心得

經過這次的 Project，我了解到要如何設電容和電感，剛開始時，我把電容和電感的初始值設定相反，幸好最後有發現到，並且驗證了講義充電和放電的關係圖。