1. Given the context-free grammar, compute the First, Follow, and Predict sets. （remember need to show λ, $ if necessary.） (3pt)

Context-free grammar:

```
1| S -> ( L )
2|    | a
3| L -> S L'
4| L'-> % S L'
5|    | λ
```

Compute the First, Follow, and Predict sets.

0|	Grammar	First()	Follow()	Predict set
1|	S -> (L)	(	$, % ,)	(
2|	| a	a		a
3|	L -> S L'	(, a	)	(, a
4|	L'-> % S L'	%	)	%
5|	| λ	λ		)

批改方式：少寫/多寫/寫錯 1-2 個扣半分，3-4 個扣 1 分，以此類推。

First Functions-

- First(S) = { (, a }
- First(L) = First(S) = { (, a }
- First(L') = { % , λ }

Follow Functions-

- Follow(S) = { $ } ∪ { First(L') – λ } ∪ Follow(L) ∪ Follow(L') = { $, % ,) }
- Follow(L) = {) }
- Follow(L') = Follow(L) = {) }

2. What is the relationship among First, Follow and Predict sets? (1pt)
   In some cases, especially when First and Follow are not empty, Predict = First + Follow (Union operation of the two sets). Else if First isn't empty, Predict=First.