David Rozas Domingo

TDT4205: Problem Set 2

Exercise 1

1.1 - 1.3

S-> uBDz
B-> Bv | w
D-> EF
E-> y | ε
F-> x | ε

	Nullable?	*First(A)*	*Follow(A)*
S	*No*	*{u}*	*{Ø}*
B	*No*	*{w}*	*{z, v, y, x}*
D	*Yes*	*{x, y, ε}*	*{z}*
E	*Yes*	*{y, ε}*	*{z, x}*
F	*Yes*	*{x, ε}*	*{z}*

1.4

	u	*z*	*v*	*w*	*y*	*x*
S	*S-> uBDz*					
B				*B-> Bv* *B-> w*		
D		*D->EF*			*D-> EF*	*D-> EF*
E		*E-> ε*			*E-> y*	*E-> ε*
F		*F-> ε*				*F-> x*

There is a conflict, so the grammar is not LL(1).