Lab 1

Crafting a Compiler

1.11
Moss uses a technique called winnowing. This is a document fingerprinting technique, dividing a document into k-grams, or contiguous substrings, where k is some integer. The kg-rams are shed and used as the fingerprint for the document. This method allows MOSS to be used for a large number of programming languages.

3.1.

Token	Extra Information, if necessary
main	
(	
)	
{	
const	
float	
payment	identifier, value
"="	
digit	384.00
;	
float	
bal	identifier
;	
int	
month	identifier, value
"="	
digit	0
;	
bal	identifier, value
"="	

digit	15000
;	
while	
(	
bal	identifier, value
>	
digit	0
)	
{	
printf	
(	
String	"Month: %2d Balance:%10.2f\n
month	identifier, value
,	
bal	identifier, value
)	
;	
bal	identifier, value
"="	
bal	identifier, value
-	
payment	identifier, value
+	
digit	0.015
*	
bal	identifier, value
;	
month	identifier, value
"="	

month	identifier, value
+	
digit	1
;	
}	
}	

Dragon

1.1.4
There are several advantages to using C as a target language. C is essentially portable machine language. C compilers have become incredible optimized over its four-plus decade life, so its very fast to execute. Its also platform-independent, so it will run on OS X, Windows, or Linux distros.

1.6.1
The values for w, x, y, z are listed as follows:
w: 13
x: 11
y: 13
z: 11