Week 7 - program 1

1. Implement non-recursive Predictive Parser for the grammar

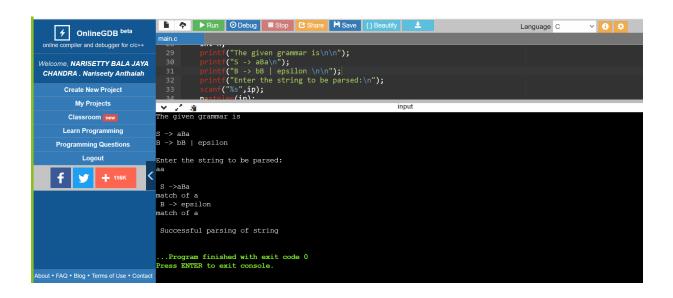
$$S \rightarrow aBa$$

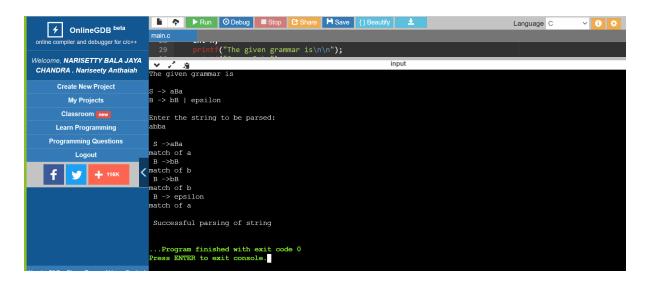
$$B \rightarrow bB \mid \epsilon$$

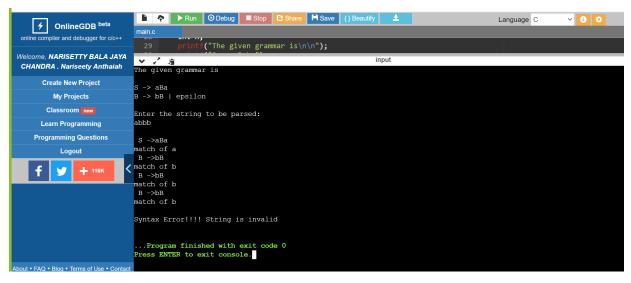
	a b	\$
S	S→aBa	
В	В→ε В→bВ	

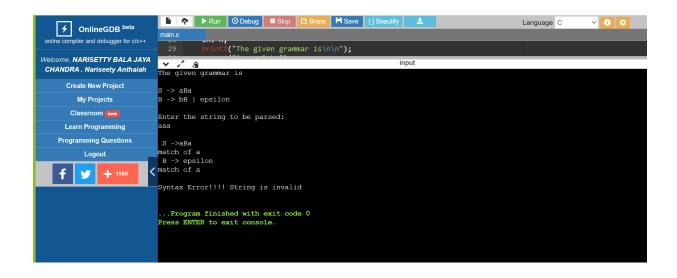
Test cases:

aa	String is successfully parsed
abba	String is successfully parsed
abbb	Error in parsing String
aaa	Error in parsing String









Week 7- program 2

2. Lab Assignment: Implement Predictive Parser using C for the Expression Grammar

$$\begin{split} E &\rightarrow TE' \\ E' &\rightarrow +TE' \mid \epsilon \\ T &\rightarrow FT' \\ T' &\rightarrow *FT' \mid \epsilon \\ F &\rightarrow (E) \mid d \end{split}$$

	d	+	*	()	\$
Е	Е→ТА			E→TA		
A		A→+TA			А→ε	А→ε
Т	T→FB			T→FB		
В		В→ε	B→*FB		В→ε	В→ε
F	F→d			F→(E)		

Test cases:

d+d	String is successfully parsed			
(d+d)*d	String is successfully parsed			
d+*+d	Error in parsing String			
i+i	Error in parsing String			

