

Due Date: (21/12/2022)

Teams: At most three students

COM 2041 Project 2

Check the following grammar and the parsing table as follows:

1. $E \rightarrow E + T$
2. $E \rightarrow T$
3. $T \rightarrow T * F$
4. $T \rightarrow F$
5. $F \rightarrow (E)$
6. $F \rightarrow id$

State	Action						Goto		
	Id	+	*	()	\$	E	T	F
0	s5			s4			1	2	3
1		s6				acc	1		
2		r2	s7		r2	r2			
3		r4	r4		r4	r4			
4	s5			s4			8	2	3
5		r6	r6		r6	r6			
6	s5			s4				9	3
7	s5			s4					10
8		s6			s11				
9		r1	s7		r1	r1			
10		r3	r3		r3	r3			
11		r5	r5		r5	r5			

Implement the Shift Reduce Algorithm using C or C++ language you should also define a Stack.

Example input: **id * id + id * (id+id)**