

Compiler Design Lab

LALR Parser

1. Write a program to create an LALR parser for the following grammar:

$E \rightarrow E + T \mid T$

$T \rightarrow T * F \mid F$

$F \rightarrow (E) \mid id$

Your program should be able to create the parser table using appropriate reduction and shift operations.

Show that your program is able to parse a valid and invalid input text. You can choose any expression involving all the operators.

5 marks.