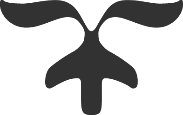


Compilers Project

Team 11



Team Members:

Omar Mohamed AbdElkareem Sec: 2, B.N: 2

Walid Mohamed Sec: 2, B.N: 31

Yahia Ali Sec: 2, B.N: 33

* **Project Overview:**

Simple C language Compiler that is designed to compile basic functions of C language components.

* **Tools and Technologies used:**
  + **Flex:** compile lex files
  + **Bison:** compile yacc files
  + **Cygwin:** generate executable files
* **Production rules:**
  + Variables and Constants declaration
  + Mathematical expressions (+, -, \*, /)
  + Assignment statement
  + Block structure ({}, ())
* **Quadruples:**
  + **MOV 3, R0** [move value 3 to register R0]
  + **MOV R0, x** [move value in register R0 to variable x]
  + **ADD R0, R1, R2** [add the value in R0 & R1 and move it to R2]
  + **SUB R0, R1, R2** [the same as ADD but subtract]
  + **MUL R0, R1, R2** [the same as ADD but multiply]
  + **DIV R0, R1, R2** [the same as ADD but divide]
* **Work devision:**
  + **Omar:** Lex file (Tokens), batch file, testcases
  + **Walid:** handle errors, symbol table, quadruples
  + **Yahia:** production rules