

Compiler Design Project 4

Small C Compiler for Java assembly code (Jasmin)

1. Supporting data type: int, float.
2. statements: arithmetic computation, including binary ($a + b$, $a - b$, $a * b$, a / b) or unary operation (a , $-a$) .
3. Comparison expression: The following relation operators are supported: {‘>’, ‘<’, ‘>=’, ‘<=’, ‘==’, ‘!=’}. Both operands must be a variable with integer type or an integer constant number.
4. if then else statements are supported. (The condition of if can only support arithmetic expression, relation operation, arithmetic expression)
5. printf function are supported. You can choose either to print a string or print a variable’s value.

For example:

(1) `printf("Hello world!\n");`

(2) `int num; num = 2019; printf("%d", num);`