**C subset的描述**

1. keyword (關鍵字)

|  |  |
| --- | --- |
| Token type | lexeme |
| INCLUDE\_ | #include <'(LETTER)\*'.h> |
| PRINTF\_ | printf |
| SCANF\_ | scanf |
| MAIN\_ | main |
| RETURN\_ | return |

1. data type (所支援的資料型態)

|  |  |
| --- | --- |
| Token type | lexeme |
| INT\_TYPE | int |
| CHAR\_TYPE | char |
| VOID\_TYPE | void |
| FLOAT\_TYPE | float |
| SHORT\_TYPE | short |
| LONG\_TYPE | long |
| DOUBLE\_TYPE | double |

3. 註解方式

// 和 /\* \*/

4. program execution

程式可包含多個函式

5. program control flow

|  |  |
| --- | --- |
| Token type | lexeme |
| WHILE\_ | while |
| IF\_ | if |
| ELSE\_ | else |
| FOR\_ | for |
| BREAK\_ | break |
| CONTINUE\_ | continue |
| SWTICH\_ | switch |
| CASE\_ | case |
| DEFAULT\_ | default |

6. program statement

|  |  |
| --- | --- |
| Token type | Lexeme |
| EQ\_OP | == |
| LE\_OP | <= |
| GE\_OP | >= |
| LT\_OP | < |
| MT\_OP | > |
| NE\_OP | != |
| PLUS\_OP | + |
| MINUS\_OP | - |
| MULTI\_OP | \* |
| DIVID\_OP | / |
| MOD\_OP | % |
| COMPL\_OP | ~ |
| PP\_OP | ++ |
| MM\_OP | -- |
| RSHIFT\_OP | << |
| LSHIFT\_OP | >> |
| ADDRESS\_OP | & |
| POINTER\_OP | \* |
| PLUS\_E\_OP | += |
| MINUS\_E\_OP | -= |
| MULTI\_E\_OP | \*= |
| DIVID\_E\_OP | /= |
| MOD\_E\_OP | %= |
| AND\_OP | && |
| OR\_OP | || |
| BIT\_OR\_OP | | |
| NOT\_OP | ! |
| XOR\_OP | ^ |
| ASSIGN\_OP | = |
| SL\_BRACK | ( |
| SR\_BRACK | ) |
| ML\_BRACK | [ |
| MR\_BRACK | ] |
| BL\_BRACK | { |
| BL\_BRACK | } |
| COMMA\_ | , |
| SEMIC\_ | ; |
| WS | (' '|'\r'|'\t'|'\n'|'\r\n') |