## P1 Lexical Definitions

- Case sensitive
- Each scanner error should display "SCANNER ERROR:" followed by details including the line number if counted
- Alphabet
  - o all English letters (upper and lower), digits, plus the extra characters as seen below, plus WS
  - No other characters allowed and they should generate errors
- Identifiers
  - o begin with a letter and
  - continue with any number of letters or digits
  - you may assume no identifier is longer than 8 characters (in testing)
- Keywords (reserved, suggested individual tokens)

```
o begin end loop void var return in out program iffy then let data
```

Operators and delimiters group (all single character except ==)

```
O = < > == : + - * / % . ( ) , { } ; [ ]
```

- Integers
  - o any sequence of decimal digits, no sign, no decimal point
  - you may assume no number longer than 8 characters (in testing)
- Comments start with @ andEndWithWithoutSpaces@