

Variables

“A way to store a value in memory of a certain size, and have it accessible by name”

Types that we have used:

- Word (numbers range from 0-16534)
- Nib (numbers range from 0-15)

ex: myCounter VAR Word

ex: someVariable VAR Nib

IF/ELSEIF/ELSE

“A conditional statement. A way to run specific code for specific conditions.”

ex:

```
test VAR Word
test = 40
IF (test < 30) THEN
    GOSUB FIRST_SUB
ELSEIF (test > 50) THEN
    GOSUB SECOND_SUB
ELSE
    GOSUB THIRD_SUB
ENDIF
' Which routine is run? (THIRD_SUB)
```

Subroutines

“A subroutine is simply a specific piece of code (often one that is used repeatedly) that is written as a unit, then called.”

example use:

```
GOSUB MY_SUBROUTINE
```

example declaration:

```
MY_SUBROUTINE:
    'do something here
RETURN
```

DO/LOOP

“A loop that will continue to repeat indefinitely.”

ex:

```
DO
    'do something here, that will be repeated indefinitely
LOOP
```

FOR/NEXT

“A loop that uses a variable to count how many times to loop.

ex:

(Assuming a variable called “loopCounter” has been declared)

```
FOR loopCounter = 0 to 40
    'do something here, that will be repeated how many times?
NEXT
```