This is a brief description of how the program works. Had to make some extra changes from the previous versions due to hitting some of the limitations of the BS2. Been spoiled by working with the Propeller.

The I/O definitions and constants below in blue are the only ones that you may want to change.

- Pin definitions if you modify the hardware connections.
- The slave addresses. The slave1 works with an unmodified INA board, and the slave2 address should work with the INA board with the A0 pads jumpered, but I did not have a second board to test with.
- The VMIN, RUNON, and RUNOFF comments pretty much sum up their purpose. The RUNOFF time is a safety waiting period to avoid constant restarts if something should go wrong with sensing the battery voltage.
- CONV is the conversion factor used to convert the on/off times in minutes to the number of loops the program takes for that time. I timed 500 loops with the phone stopwatch app so it is reasonably close, but not precision timing.
- Be aware that the largest number of loops is limited to 65535, so (RUNON + RUNOFF) * CONV cannot be larger than that.

```
' -----[ I/O Definitions ]-------------------------------------------------
'
RY1        PIN           0
RY2        PIN           1
BICLED1    PIN           3
BICLED2    PIN           4
GRNLED     PIN           14
SDA        PIN           7
SCL        PIN           8

'++++++++++++i2c constants++++++++++++++++
Nak        CON           1
Ack        CON           0
INA219Sl1 CON            $80   'slave1 address
INA219Sl2 CON            $81   'slave2 address
'++++++VOLTAGE MIN & GENERATOR RUN TIME VALUES++++++
VMIN       CON           12300  'Voltage in millivolts to start generator
RUNON      CON           150    'Run time period in minutes for the generator
RUNOFF     CON           10     'Generator off time in minutes before it will restart
' Minutes to loop count converted constants
CONV       CON           50     'Multiplier to convert minutes to loop counts
Genon      CON           RUNON + RUNOFF * CONV
Genoff     CON           RUNOFF * CONV
'++++++++++++++Variables++++++++++++++++++++
```