```
// POST Geiger Counter (GC) test code
// Test to see if GC is working

// Global variables
// GC output is connected to pin 18
   const unsigned int gc_pin = 18;

// Attach 5th interrupt of the Arduino Mega.
   const unsigned int gc_intnumber = 5;

// Declared volatile because two threads of execu
// Value is initially set to zero because there
    volatileunsigned int gc_counts = 0;

// gc_cnt to store the number of counts
// from gc_counts no counts are missed
// while writing to buffer
   unsigned int gc_cnt;

// Function for interrupt
   // gc_counts is increased by 1
   // every time function called.
   // void loop will reset when written memory
   void  gc_interrupt(){
     gc_counts++;
      }

void setup(){
// Sets up communication with computer
   Serial.begin(9600);
```

```
// Sets up gc_pin as input
   pinMode(gc_pin, INPUT);

// Sets up the interrupt to trigger for a rising
// gc_pin (18) corresponds to the 5th interrupt
// gc_interrupt is the function we want to call o
   attachInterrupt(gc_intnumber,  gc_interrupt,RI
}

void loop(){
// delay 5 secconds
   Serial.println("5 second data window started..
   delay(5000);

   gc_cnt = gc_counts;
   gc_counts = 0;

// prints results on screen
   Serial.println(gc_cnt);
   Serial.println("Geiger counter reset");
   Serial.println(" ");
}
```