

```
*****/
```

```
/*SNOW STORM DISPLAY VERSION 2
```

```
In this version the random number generator is always reset to 0xFFFF  
(1111 1111 1111 1111) and the EEPROM is not used.
```

```
When the WDT times out the display continues after a short pause but  
always restarts from the same state (i.e. all ones).
```

```
Press sw_3 to operate the WDT.*//
```

```
#include "Proj_2B1_header_file.h"
```

```
unsigned int PRN; //Global memory location used to store "pseudo random numbers"
```

```
int main (void){
```

```
setup_HW;
```

```
wdt_enable(WDTO_250MS);
```

```
config_sw1_and_sw2_for_PCI;
```

```
sei();
```

```
//Following a WD reset the PRN is re-initialised to 0xFFFF  
//SW1 is not used
```

```
PRN = 0xFFFF;
```

```
//Program supplied initial value for PRN
```

```
while(1){
```

```
//Infinite while loop
```

```
I2C_Tx_2_integers(PRN, (PRN<<1));
```

```
//Display two "pseudo random numbers"
```

```
PRN = PRN_16bit_GEN (PRN);
```

```
//Generate a new PRN using the previous value as input
```

```
Timer_T0_10mS_delay_x_m(10);
```

```
//Pause before repeating
```

```
wdr();}}
```

```
//Reset the watchdog timer which avoids the possibility
```

```
//of a reset for another 250mS
```

```
ISR(PCINT2_vect)
```

```
{if (switch_2_up)return; else while(1);}
```

```
//If switch_3 is pressed put program execution on hold
```

```
//The watchdog timer will not be reset and will "time out"
```