

```
int main (void)
{ unsigned int Random_num;
  unsigned int PORT_1, PORT_2;
  unsigned char PRN_counter, shift_display;
  setup_HW;
  _delay_ms(10);
  PRN_counter = 0;
  Random_num = PRN_16bit_GEN (0, &PRN_counter);
  while (switch_2_up)wdr();

  PORT_1 = 1;
  PORT_2 = 0x8000;
  while (1)
  { while (1)
    { Timer_T0_10mS_delay_x_m(2);
      while (switch_2_up)wdr();

      shift_PORT_1;
      shift_PORT_2;
      I2C_Tx_2_integers(PORT_1, PORT_2);

      if (PORT_1 == PORT_2)
      {
        Timer_T0_10mS_delay_x_m(35);
        if (switch_2_up)break;
        else while (switch_2_down)wdr();
      }

      if (PORT_1 != PORT_2)
      {
        Timer_T0_10mS_delay_x_m(16);
      }
    }

    while (switch_2_up)
    {
      flash_display;
    }
  }
}
```