```
int main (void)
                    //Example 11
 { unsigned int PORT 1 = 1;
 char m = 1;
char overflow = 0;
 setup_HW;
wdt_enable(WDTO_30MS);
while(switch_1_down)wdr();
while (1)
 { I2C_Tx_2_integers(PORT_1, ~PORT_1);
   Timer_T0_10mS_delay_x_m(8);
   if (m <= 5)
     PORT_1 |= (PORT_1 << 1);
     m += 1;
   wdr();}
   else PORT_1 = PORT_1 << 1;</pre>
   if (overflow)PORT_1 |= 1;
   if (PORT_1 & 0x8000) overflow = 1;
   else overflow = 0;
   while(switch_1_down); }}
   int main (void)
                     //Example 12
 { unsigned int random num;
 unsigned char PRN counter;
 long PORT_1 = 1, PORT_2 = 1;
 setup_HW;
wdt_enable(WDTO_30MS);
 PRN counter = 0;
 random_num = PRN_16bit_GEN (0, &PRN_counter);
while (1)
 { for (int m = 0; m < random_num % 3; m++)
   { if (!(PORT_1 = ((PORT_1 * 2) % 0 \times 10000)))
       PORT_1 = 1;}
   if (!(PORT_2 = ((PORT_2 * 2) % 0x10000)))
   PORT 2 = 1;
   I2C_Tx_2_integers(PORT_1, PORT_2);
   Timer_T0_10mS_delay_x_m(8);
   random num = PRN 16bit GEN
   (random num, &PRN counter);}}
```