```c
int main (void)
{ unsigned int sixteen_bit_PRN;
   unsigned int random_num[2];
unsigned char PRN_counter=0;
char display_string[8], num_string[8];
char num_length;
   int num_counter=0;


  setup_HW;

  PRN_counter = 0;
  random_num[0] = PRN_16bit_GEN (0, &PRN_counter);

sixteen_bit_PRN = random_num[0];

  while (1)
  { num_length = Bin_to_string_Local(random_num[num_counter%2], num_string);

    for(int n = 0; n <= num_length; n++){
    display_string[0] = num_string[num_length - n];
  I2C_Tx_8_byte_array(display_string);_delay_ms(100);

    for(int m = 0; m < 7; m++){
display_string[7-m] = display_string[7-m-1];}

Timer_T0_10mS_delay_x_m(2);}

random_num[(num_counter+1)%2] = new_random_number
 (&sixteen_bit_PRN, &PRN_counter);

num_counter += 1;}}
```