

```
int main (void){
long Num_1;

char digits[8];
char result[8];
int counter = 0;

setup_HW;

switch(reset_status){
    case POR_reset:          break;
    case WDT_reset:          String_to_PC_Basic(message_2);break;
    case External_reset:     String_to_PC_Basic(message_1);break;}

sei();
while((switch_1_down) || (switch_2_down) ||(switch_3_down));    //wait for switch release

Num_1 = number_from_IO();
I2C_Tx_long(Num_1);                                           //Sends number to the display
Timer_T0_10mS_delay_x_m(15);

root_computation(Num_1, digits);
    Num_string_to_PC_Basic(digits);
    for(int m = 0; m < 8; m++)result[m] = digits[7-m];
    I2C_Tx_8_byte_array(result);

while(switch_3_up);
SW_reset;}
```