```c
#include "Proj_3A_header_file.h"

int main (void){
char symbol, User_response;

setup_HW;
User_prompt;                                //Respond by pressing either 'R' or 'r'

switch(User_response){

case 'r':
newline();
    symbol = '!';                           //number 33
    while(symbol <= '~'){                    //number 126
    Char_to_PC_local(symbol);               //display symbol on pc screen
    Timer_T0_10mS_delay_x_m(15);
    symbol++;                               //go on to next symbol
    }break;

case 'R':
symbol = '!';
    while(symbol <= '~'){
    Num_to_PC_local(symbol);                //display number on the PC screen together
    Char_to_PC_local(symbol);               //with the corresponding symbol
    Timer_T0_10mS_delay_x_m(15);
    symbol++;
    if(!((symbol-'!')%8))newline();          //format the output
    else Char_to_PC_local('\t'); }
    break;}                                 //End of switch block
    SW_reset;}


/************************************************************************************************/
void Num_to_PC_local(char x)                //convert a number to three chars
{char y; char z;                            //Consider x = 115 (the symbol s)
y = x/100;                                  //y = x/100 = 1
z = x%100;                                  //z = x%100 = 15
Char_to_PC_local(y + '0');                  //sends char  '1'
Char_to_PC_local(z/10 + '0');               //sends char  15/10 +'0' = '1'
Char_to_PC_local(x%10 + '0');               //sends Char  15%10 +'0' = '5'
Char_to_PC_local(' ');}


/************************************************************************************************/
void Char_to_PC_local(char data)            //Local function only:  normally use "Char_to_PC()"
{while (!(UCSR0A & (1 << UDRE0)));           //Wait here until UDRE0 is set to 1        //
UDR0 = data;}                               //Transfer data to UDR0 which will automatically be sent to the PC.
```