Source Listing for AutoFlex .c file

```
#include "ifi_aliases.h"
#include "ifi_default.h"
#include "ifi_utilities.h"
#include "user_routines.h"
#include "printf_lib.h"
#include "user_Serialdrv.h"
#include "AutoFlex.h"

/*** DEFINE USER VARIABLES AND INITIALIZE THEM HERE  ***/


#define _P1_Y 0
#define _P2_Y 1
#define _P3_Y 2
#define _P4_X 3

#define TICKS_PER_TENTH 4
static unsigned char tick_counter   = 0;
static unsigned int  tenths_of_secs = 0;
unsigned int tenths_of_secs_driver = 0;
unsigned int tick_counter_driver = 0;
unsigned char capture_flag = FALSE;

extern const rom unsigned char command [150][NUM_OF_INPUTS];
//-------------------------------------------------------------
void autoflex_playback(void)
{
/*********************************************************************************************/
//   run the autonomous commands for only  15 seconds then stop and wait for driver mode
//*********************************************************************************************
  if (tenths_of_secs < 149)
  {
    /* This code creates a counter that increments approximately once per tenth of a second   */
    tick_counter++;
    if (tick_counter >= TICKS_PER_TENTH)
    {
      tick_counter = 0;
      tenths_of_secs++;
      printf("%d ",tenths_of_secs);
    }

    p1_y = command[tenths_of_secs][_P1_Y];
    p2_y = command[tenths_of_secs][_P2_Y];
    p3_y = command[tenths_of_secs][_P3_Y];
    p4_x = command[tenths_of_secs][_P4_X];

  }
  else
  {
    p1_y = p2_y = p3_y = p4_y = 127;
  }

  Default_Routine();

}
```

Source Listing for AutoFlex.c (contnued)

```
/*****************************************************************************/
// This function will record command for  15 seconds from the time
// the trigger button is pressed on the port  1 joy stick.
// it is suggested that fresh batteries be used for each recording session
// Make sure competiton port dongle is set to practice  (not Autonomouse) and
// cycle power to reset computer before recording
/*****************************************************************************/
void autoflex_recorder(void)
{
  if ((p1_sw_trig == TRUE) && (capture_flag == FALSE))
  {
    capture_flag = TRUE;
    printf("#include %cAutoFlex.h%c\n",'"','"');
    printf("const rom char command[150][NUM_OF_INPUTS] = {\n");
    printf("// cs------ place data from trial run between here-----\n");
  }


  if ((capture_flag == TRUE) && (tenths_of_secs_driver < 149))
  {
    tick_counter_driver++;
    if (tick_counter_driver >=TICKS_PER_TENTH)
    {
     tenths_of_secs_driver++;
     tick_counter_driver =0;
     printf("{%3d,%3d,%3d,%3d},\n",(int)p1_y,(int)p2_y,(int)p3_y,(int)p4_x);
    }
  }
  else
  {
    if ((p1_sw_trig == FALSE) && (capture_flag == TRUE))
    {
      capture_flag = FALSE;

       tick_counter_driver = 0;
       tenths_of_secs_driver = 0;
       printf("{127,127,127,127}\n");
       printf("// c_e ------        and here   ----------\n");
       printf("};\n");
    }
  }
}
       /*****************************************************************************/
```