```
/*****************************************************************************/
/*
  Purpose:
    plot cordic rotating vectors

  Discussion:

  Licensing:
    This code is distributed under the GNU LGPL license.

  Modified:
    Feb 2012

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  Parameters:
    Input, char * file_name

*/

#include <stdio.h>
#include <stdlib.h>

#include "gnuplot_i.h"

#define SLEEP_LGTH  10


void plot_vectors(char *fname)
{
    gnuplot_ctrl    *   h1;
    char str[2048], *s = str;
    int i, n, k;

    printf("*** example of gnuplot control through C ***\n") ;
    h1 = gnuplot_init() ;

    gnuplot_setstyle(h1, "lines") ;
    gnuplot_set_xlabel(h1, "x axis") ;
    gnuplot_set_ylabel(h1, "y axis") ;

    gnuplot_resetplot(h1) ;

    gnuplot_cmd(h1, "set autoscale");
    gnuplot_cmd(h1, "set xtic auto");
    gnuplot_cmd(h1, "set ytic auto");
    gnuplot_cmd(h1, "set xr [-1.8:+1.8]");
    gnuplot_cmd(h1, "set yr [-1.8:+1.8]");
    gnuplot_cmd(h1, "set grid");

    n = sprintf(s, "plot \'%s\' using 1:2:3:4 ", fname);

    s += n;
    n = sprintf(s, "with vectors head filled lt 2 lc 1;") ;

   printf("%s\n", str);
    // gnuplot_plot_slope(h1, 1.0, 0.0, "");
    getchar();


    gnuplot_cmd(h1, str);
   printf("after cmd \n");
```

```
    // pause();

    getchar();

   printf("after getchar \n");


    gnuplot_close(h1) ;
    printf("after close \n");
}
```