```
/***************************************************************************/
/*   pseudo.c                                                              */
/* This program generates the negative image.                              */
/***************************************************************************/

#include <stdio.h>
#include "hvision.h"

   IMAGE *im, *rim, *gim, *bim;



main (argc, argv)
/***************************************************************************/
/* main program to generate the negative image.                            */
/***************************************************************************/
   int argc;
   char **argv;
{
   int i, j;


   /***********************************************************************/
   /* f1.im: The first image frame                                        */
   /* f2.im: The second image frame                                       */
   /***********************************************************************/
   if (argc != 5) {
      printf("pseudo lena.im lena_r.im lena_g.im lena_b.im \n");
      exit(1);
   } /* if */

   /* Read in the original image                                          */
   im = hvReadImage(argv[1]);
   if (im == NULL) {
```

```
        printf("cannot open file %s\n",argv[1]);
        exit(1);
    } /*if*/

    rim = hvCopyImage(im);
    gim = hvCopyImage(im);
    bim = hvCopyImage(im);

    for (i=0; i<im->height; i++) {
        for (j=0; j<im->width; j++) {
            B_PIX(rim,i,j) = 255-B_PIX(im,i,j);
            B_PIX(gim,i,j) = 128;
        } /*j*/
    } /*i*/

    hvWriteImage(rim, argv[2]);
    hvWriteImage(gim, argv[3]);
    hvWriteImage(bim, argv[4]);
} /*main*/
```