```
#include <stdio.h>

/*
 * To programma auto dhmiourgei ena kamba 200x100
 * kai sthn synexeia orizei thn synarthsh setpixel
 * h opoia mesa ston kamba anabei to pixel me
 * syntetagmenes x,y sthn RGB timh pou dinetai me
 * treis parametrous.
 *
 * To apotelesma eksagete san arxeio eikonas
 * ppm to opoio mporeite na to anoiksete me
 * opoiodhpote paketo grafikwn (px gimp)
 *
 * gia na to treksete dwste
 * gcc SetPixel.c
 * gia na to metaglwtisete kai sthn
 * synexeia
 * ./a.out > test.ppm
 * opote 8a grapsei to arxeio eikonas
 * sto file test.ppm
 *
 *
 */

int xres=200,yres=100;
int i;
unsigned char *pa;
/* Prosekste ton orismo tou pa san deikth
 * apo arrays pou apoteleitai apo short
 * integers.
 */

main()
{
        int size;

        xres=200;
        yres=100;
        size=xres*yres*3;

        unsigned char a[size];
        pa=&a[0];
        size=xres*yres*3;


        /*
```

```
    * Gemizoume ton pinaka me stoixeia 0 dhladh
    * ton maurizw.
    */

   for (i=0; i < size; i++)
           a[i]=0;


setpixel(1,0,255,234,234);
/* Anabw to pixel 1,0 sthn RGB timh 255,234,234
 */
setpixel(10,5,255,255,255);
/* Anabw to pixel 10,5 sthn RGB timh 255,255,255 (leuko)
 */



   /* write file
    * Gia na katalabete pws paw na grapsw to arxeio grafikwn
    * ppm mporeite na diabasete ta specifications tou ppm
    * sthn selida
    * http://www.dcs.ed.ac.uk/home/mxr/gfx/2d/ppm.txt
    * h apla na dwsete
    * man ppm
    * se ena kala ry8mismeno
    * unix mhxanhma
    */

   printf("%s\n","P3");
   printf("%d\t%d\n",xres,yres);
   printf("%d\n",15);

   for (i=0; i < size; i++)
   {
           printf("%d%s",a[i]," ");
   }
}

/*
 * Routina Set Pixel
 * Prosekste oti gia na perasw ton pinaka sthn
 * yporoutina kanw xrhsh pointer, kytakste thn
 * selida 141 tou Kernighan -Ritchie.
 */
int setpixel(int x, int y, int R, int G, int B)
{
   i=3*xres*y+3*x;
```

```
        *(pa+i)=R;
        *(pa+i+1)=G;
        *(pa+i+2)=B;
}
```