```
#include <stdio.h>
#include <stdlib.h>
#include "ppmtools.h"
/*
  yuxian wang
  215170418
*/
#define MAXIMAGE 512*512*3
unsigned char im[MAXIMAGE], out[MAXIMAGE];
int main(int argc, char *argv[])
  int i, j, width, height;
  if(argc != 3) {
    fprintf(stderr, "Usage %s in.ppm out.ppm\n", argv[0]);
    exit(1);
  }
  if(readppm(argv[1], im, &width, &height) < 0) {</pre>
    fprintf(stderr,"%s: read of %s failed\n", argv[0], argv[1]);
    exit(1);
  }
  for(i=0;i<height;i++) {</pre>
    for(j=0;j<width;j++) {
      unsigned char r, g, b;
      r = im[i*(3*width)+j*3 + 0];
      g = im[i*(3*width)+j*3 + 1];
      b = im[i*(3*width)+j*3 + 2];
      out[i*(3*width)+j*3 + 0] = r;
      out[i*(3*width)+j*3 + 1] = 0;
      out[i*(3*width)+i*3 + 2] = 0;
    }
  }
  if(writeppm(argv[2], out, width, height) < 0) {</pre>
    fprintf(stderr,"%s: write of %s failed\n", argv[0], argv[2]);
    exit(1);
  }
  return 0;
```