Course	COMP-8567	June 30, 2020
Instructor	Dr. B. Boufama	
Assignment	04	
Due date	Thursday July 9, 11.59pm	

Using Unix I/O system calls(*read(), write(), lseek(),...*), write a C program, called **reversePicture**, to transform a given picture into an up-side-down picture. In particular, your program should reverse the image by directly reading from one file and writing to another file, without the need of a two-dimensional array.

The input image is a gray-scale picture, where each pixel has a value between 0(black) and 255(white). The image is simply an $nbLines \times nbCols$ matrix of bytes, where each byte store the gray-level of the corresponding pixel.
$nbLines$ is the number of lines and $nbCols$ is the number of columns.

To help you understand the structure of the binary file containing the image, here is the function that was used to store the image in a file.

```
void saveImage(char **image, int nbLines, int nbCols, FILE *fd){
 int i;

 fputs("P5\n", fd);          // just a code
 fprintf(fd, "%d %d\n", nbLines, nbCols);
 fputs("255\n", fd);         // another code

 for(i=0; i<nbLines; i++)
   fwrite(image[i], nbCols, fd);
}
```

Notes :

- The image(the input file to your program) is in the same folder
- Many image reader can be used to view your images (input and output). You can, for example, use the UltraFileOpener that can be downloaded from **http://www.ultrafileopener.com**.