SIMPLE\_FILE\_EDITOR

Read a two-dimensional bitmap from the file. Each line of the file represents one row of the bitmap. The dimension of the bitmap is mNY x mNX, where mNY is the number of rows and mNX is the number of columns. The maximum number of rows and columns is 100.

You must implement the following to functions:

1. Press ‘<” to rotate the image from right to left.
2. Press ‘>” to rotate the image from left to right.

Use a 2D array to store the bitmap.

/\*

Set up the bitmap based on the data stored in a file.

Each line in the file is mapped to one row

of the bitmap in a consecutive manner.

Steps:

Open the file.

Read a file.

Repeat until EOF

read a line from the file each time

set the bitmap based on the current line

Close the file.

\*/

void SIMPLE\_FILE\_EDITOR::readFile( )

/\*

Set one row of the bitmap based on the input string inputString.

The elements of the row are mapped one to one to the input string.

The element of a bitmap is set as follows.

If inputString[i] is the space character, the value of the element is set as 0.

Otherwise, the value of the element is set to (int) inputString[i].

\*/

void SIMPLE\_FILE\_EDITOR::storeOneRowToBitmap( const string &inputString )

/\*

Show the system title

Show "<: rotate to left"

Show ">: rotate to right”

\*/

void SIMPLE\_FILE\_EDITOR::askForInput( )

/\*

Handle the key events

\*/

bool SIMPLE\_FILE\_EDITOR::handleKeyPressedEvent( int key )

/\*

Get the dimension of the bitmap to (nx, ny).

nx : number of columns

ny : number of rows

\*/

void SIMPLE\_FILE\_EDITOR::getBitmapDimension(int &nx, int &ny) const

/\*

Return the bitmap value at (x, y).

x : column index

y : row index

\*/

int SIMPLE\_FILE\_EDITOR::getBitmapValue(int x, int y) const

Add functions for rotating the image.