Write a Python script to do the following:

1) Create a class titled GridIO that implements the following methods:
   a) ReadGrid(filename)
      i) ReadGrid should return a 2d list of integers representing the grid (example shown below). The values of the 2d list should match the values in the file. You can use the type() function to see if the elements are ints.

   b) WriteGrid(filename, grid)
      i) WriteGrid should accept a string titled 'filename' and a 2d list of ints titled 'grid'. The method should write the contents of 'grid' to the filename specified. The format of the written file should be the same as the format of the file passed to ReadGrid: each row of the grid should occupy its own line, there should be spaces between each element, and there should be no trailing whitespace at the end of each line.

2) Write a function ModifyGrid(grid, location, value) that changes the grid at the specified location to the specified value.

3) Write a function FindAllFreeLocs(grid) that returns the locations of all free spaces (0's) in the grid. A single location should a list in the form [row, column]. The return value should be a 2d list: [[row_1, column_1], [row_2, column_2], …, [row_n, column_n]].

4) In a main() function, do the following:
   a) Call GridIO.ReadGrid with a filename of a grid.
   b) Print the returned 2d list to the console.
   c) Use FindAllFreeLocs to get the locations of all the 0's in the grid.
   d) Use the ModifyGrid function to change all free space locations to a random integer between 2-9.
   e) Print the modified grid to the console.
   f) Write the modified grid to a file using GridIO.WriteGrid.

A grid should be in a .txt file and will be in the form:

```
1 1 1 1 1 1 1 1
1 0 0 0 1 1 1 1
1 0 0 0 0 0 0 1
1 1 1 0 0 1 0 1
1 0 1 0 0 1 0 1
1 0 0 0 0 0 0 1
1 1 1 1 1 1 1 1
```
Where '1's correspond to obstacle space and 0's correspond to free space.