Compiler design principles- AST manipulation and code generation homework
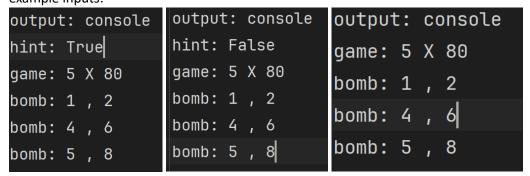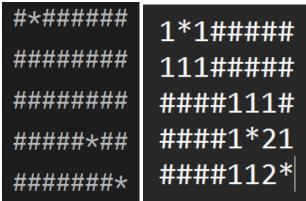
The grammar for minesweeper DSL is provided to you.

Make the following changes to the compiler:

- Allow the user to specify whether they would like for their minesweeper game to display hints to user (a hint is the number of bombs that are adjacent to a cell)
  example inputs:

  ```
  output: console
  hint: True
  game: 5 X 80
  bomb: 1 , 2
  bomb: 4 , 6
  bomb: 5 , 8
  ```

  ```
  output: console
  hint: False
  game: 5 X 80
  bomb: 1 , 2
  bomb: 4 , 6
  bomb: 5 , 8
  ```

  ```
  output: console
  game: 5 X 80
  bomb: 1 , 2
  bomb: 4 , 6
  bomb: 5 , 8
  ```

  example output:

  ```
  #*#######
  #########
  #########
  #####*##
  #######*
  ```

  ```
  1*1#####
  111#####
  ####111#
  ####1*21
  ####112*
  ```

- The changes should also appear in the AST (the hint option should be displayed in the AST)
- You are not allowed to make any changes to main.py script or any of the files inside the default_codes folder (only files that can be altered are the grammar file, the listener and the code generator).

Providing a document file and a video explaining the changes to the project and showcasing a few different examples is necessary and part of your grade.

Project is due Friday 24th, May, 2024