Ben Stones – Snake Game

# Functions:

## Main module:

***def initialiseGame(x,y):***

Clears the information needed for a new game and displays the ouput on screen. The *drawHomeWindow*() function from the window module is ran and then the game waits for a click to start the game with the *playGame()* function. The x and y values are needed as a starting point for the turtle.

***def playGame(x,y):***

Main function that controls the game. The game board is drawn using the *drawGameWindow()* function from the window module. The score is displayed, and the location of the snake is checked to ensure it’s on the game board and doesn’t collide with itself. Food is drawn when the game is initialised and once it has been eaten and the score is incremented. The snake is set to move using the *move()* function and the arrow keys control the direction of movement.

***def move():***

The movement of a snake is controlled by a turtle. The turtle is set to face the inputted direction and the moves forward, stamping green squares. The length of the snake is controlled and the speed at which the turtle moves at is dependent on the score.

***def gameOver():***

Game over text is displayed on screen, the previous and high scores are displayed and the game waits for a click to restart or an “e” to be inputted to exit.

***def displayHighScore():***

The contents of the high score file are opened and displayed on screen.

***def displayScore():***

The current game score is displayed on screen.

***def food():***

A red square representing food is displayed at random coordinates on the game board.

***def displayGameOverText():***

Red “game over” text flashes on the screen 3 times, then displayed permanently along with the option to play again or exit.

***def updateHighScore():***

The high score file is updated if the current score is greater than the saved high score.

***def displayPreviousScores():***

The previous 5 scores are loaded from the recent scores file and displayed in the centre of the screen.

***def updatePreviousScores():***

The recent scores file is updated to store the 5 most recent scores after a game is played.

***def up():, def down():, def left():, def right():***

The direction of the head of the snake is changed to face the intended direction of movement.

## Window module:

***def drawHomeWindow():***

Opens the graphics window and displays the welcome text.

***def drawGameWindow():***

Draws a red 180 pixel^2 game board.