**Snake Game- Concepts Project- 11932981 Ahmad Fares**

**Variables & their Scope:**

The main class, calls the J frame class which calls the J panel class.

All the work will be in the J panel Class So this is the one we will be studying.

**Global Variables:**

Int type:

Screen\_Width, Screen\_Height, Unit\_Size, GameUnits,Delay, bodyParts,preyEaten, preyX,prey, X[], Y[] (int arrays)

Char: direction,

Bool: running,

Timer, Random

**Global Scope:**

-All the variable above share the same Global Scope of the J Panel Class, only two of them are overridden in 1 method,(the X and Y)

**Local Scope:**

-The methods we created to implement the game use the graphics object (we a named it G) it is not declared in the class but it is local to each method.

-In the method move(), the scope of X and Y is local since we need to get the new coordinates from the loop iteration before moving the snake, this is why X and Y are called once from global when the method starts and then overwritten when declared locally after the first iteration of the loop. The same for check collision and check Prey. Also in the same method the char variable “direction” has a local scope in the 4 cases of our if statement: Up Down Left Right

**Local Variables :**

In move(): X[], Y[], Direction

In checkCollision():X[],Y[],Running

In checkPrey():X[],Y[],PreyX,PreyY,bodyParts

In MykeyAdapter(): Direction

In GameOver(): running

In newPrey(): Graphics G (Local Variable Only)