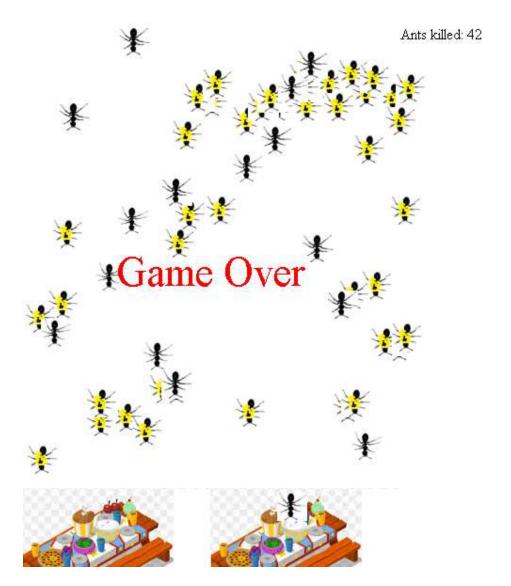**On Your Own Assignment 2**

**Submit this as a source code file on Canvas. For some reason, animation causes webhost to update its hit counter excessively, which can cause them to suspend your account.**

Overview: You are going to make an ant killer game. The game itself is played on a canvas of 400 x 500 pixels. At the bottom of the canvas are two picnic tables. Ants randomly start crawling from the top of the screen to the bottom of the screen. Clicking on an ant (either with the mouse or the finger) crushes it. If an ant manages to get to 500 pixels (i.e., the bottom of the screen), the game ends and a "Game Over" sign appears. The game should track how many ants got killed.



Ants: Ants are 30 pixels long. They change animation and walk 5 pixels forward every 70 clock ticks. You might want to allow the user to kill an ant if they are within a 40x40 square of the ant, rather than a 30x30 square. Ants should stop animating

when they are crushed (in which case they are swapped with a picture of a dead ant), or when one of the ants reaches the picnic table.

Every time an ant is killed, a squishing sound is played.  Also, the counter of the number of ants killed is refreshed.

The game becomes more difficult every 1000 clock ticks.  The game spawns a new ant at 1000/difficulty.  Thus, the first ant is spawned after 1000 clock ticks.  When the difficulty increases to 2, an ant is spawned every 500 clock ticks.  When it is increased to 3, then the ant is spawned every 333 clock ticks etc.  Eventually, the player is overcome by an ant swarm and loses.

When an ant reaches the picnic table, a munching sound is played.  Also, a red Game Over sign appears starting at coordinates (100, 200).  This sign is initially 14pixels high, but grows to 44 pixels high.  Growth is one pixel every 20 clock ticks.  At this point, all animations stop.

Scoring (10 marks total):
1 point: Ant spawns at a random point at the top of the screen
1 point: Ant wiggles it's legs correctly
1 point: Ant moves to the bottom of the screen at a sedate pace
1 point: When an ant meets the picnic table, all animations stop
1 point: Clicking on an ant with mouse or finger kills it, a squishy noise is made and the ant stops animating
1 point: Score refreshes with each ant death
1 point: Game over sign appears and grows
1 point: Game becomes increasingly more difficult
2 points: Unexpected things do not happen


Hints:
- onmousedown works better than onclick.
- A mouseclick is event.clientX and event.clientY
- The zIndex sets which thing goes on top.  Set the GameOver text to zIndex 1000 or something large so it goes on top of the many crushed ants.