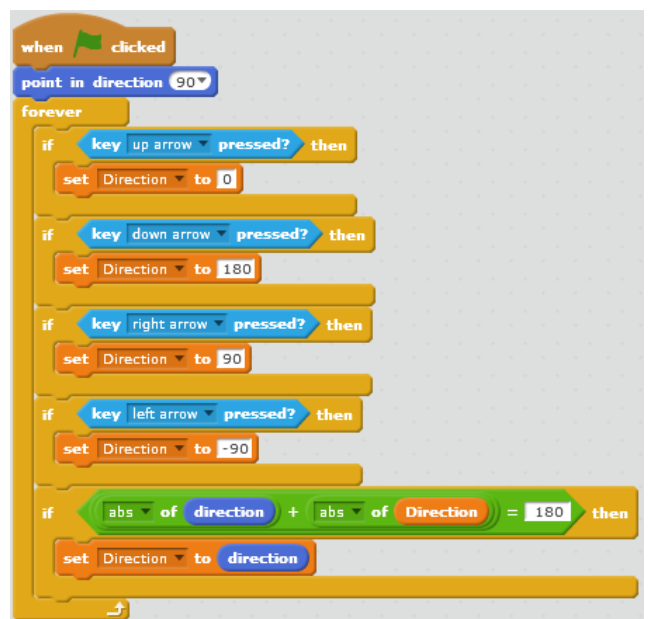# Lesson 10. Snake

Task: Create a game "Snake" – a snake grows for bonuses. The game is over when the snake hits the edge or itself.


Step 1: Preparation

1. Create a new project ("Create" -> menu

"File" -> "New");

2. Delete default sprite (right-click, "delete");

3. Add a new sprite of a snake (category "Things",

"Stop") and shrink it 10 times;

4. Rename the sprite to "Snake".

Step 2: Snake's movements

1. Add a script to define the direction of

snake's movement. Create a variable "Direction"

which will be responsible for direction and make

it invisible. Also add a checkup in order to make

sure that our snake will not move to the opposite

direction;

2. Create 2 values "list" – X and Y;

3. Create a script for snake's movement which

will stamp its costumes during movement;
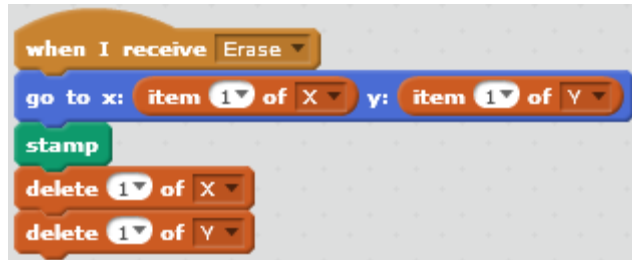
4. Add a new sprite, similar to the one in Step 1,
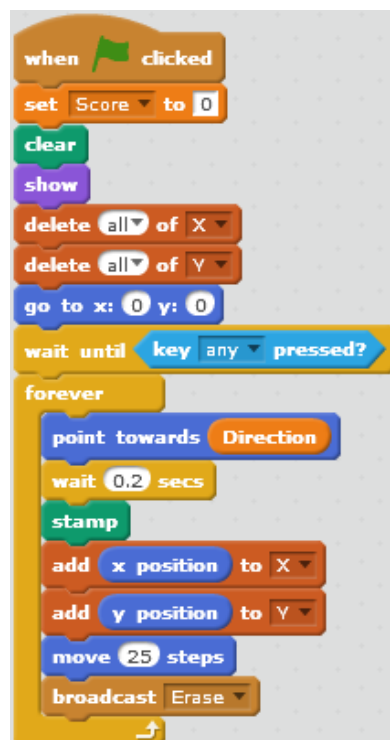
but shrink it only 9 times;

5. Rename the added sprite with "Background";

6. Edit the sprite coloring it with white color (color similar to our main scene background). This sprite will be used to "erase" our snake's tail;

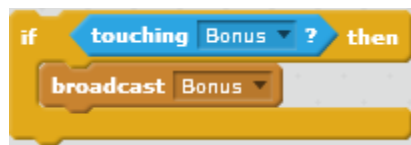7. Add a script for this sprite ("Background"):

Step 3: Bonus

1. Add a new sprite and rename it to "Bonus". Let us add a few costumes to this sprite – "Things": Bananas, Orange2-a and Watermelon-a;

2. Shrink the size of "Bonus" to the size similar to the "Snake";
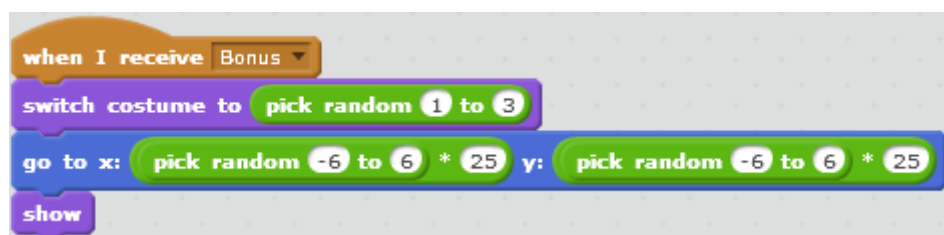
3. Add an announcement about getting a Bonus to the snake's script:

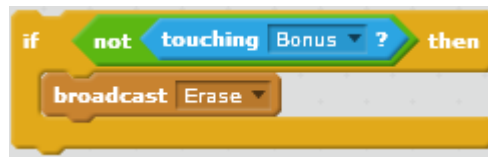4. Create a script for sprite "Bonus" which will place your Bonus in the random coordinates of the scene:

5. Add a script which moves the sprite to a new location and changes its costume after being got by the snake:
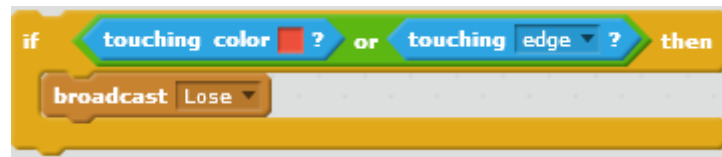
Step 4: Snake grows after getting a Bonus

1. Change snake's script in order to invoke Erase block only if the "Snake" does not touch a "Bonus":

2. Add a condition to define the end of the game in case the snake hits the edge or itself. We will add a command which will define conditions of losing the game:

Additional tasks

1. Add a script which will add one point for each Bonus got by the snake;

2. Add a new sprite (Game over) which will inform about the end of the game;

3. Add some sounds to be played when the snake gets a Bonus.