PAC MAN TUTORIAL

There is a template available which has the backgrounds and main sprite characters already prepared. You can use this if you like – just ask one of the mentors to copy it to your computer.

However you should familiarise yourself with how you can create these also. All the steps needed are below.
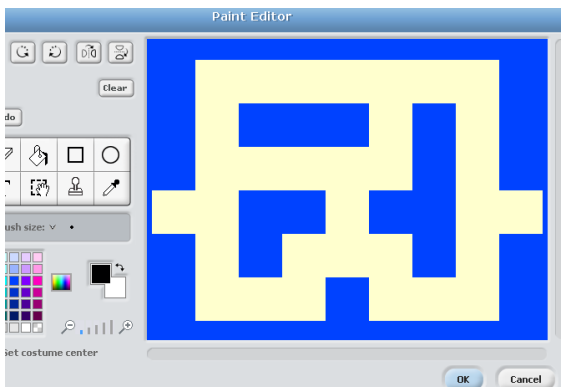
STEP 1 – BACKGROUND (Included in Template)
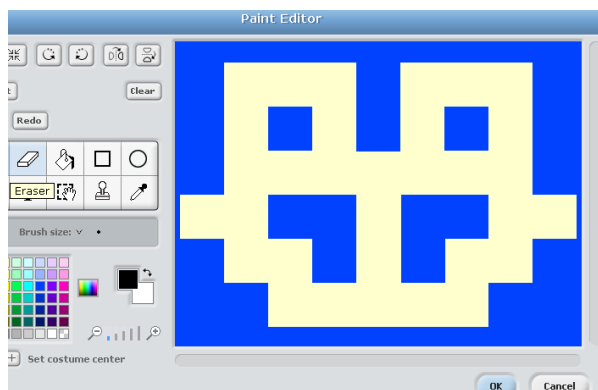
Open up your Stage and Edit.

- You want to create the effect of having 2 different levels which look like a maze of sorts. Use the rectangle tool in the editor (that's the square) and the blue fill to create the effect. You can try out different variations.
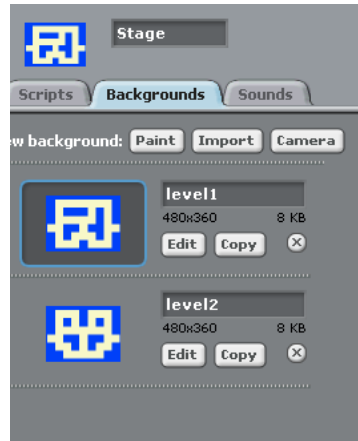
LEVEL 1

LEVEL 2

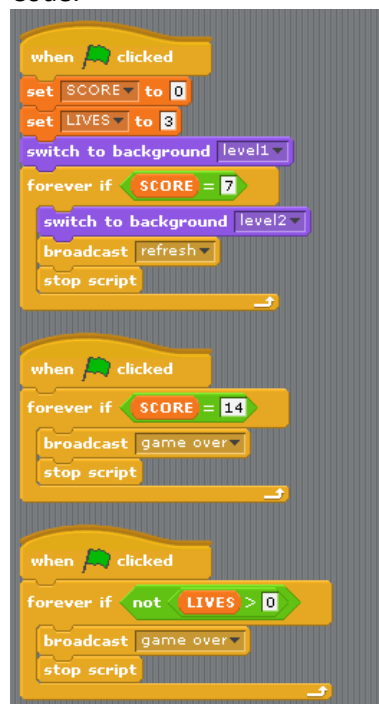- Call your 2 different backgrounds Level1 and Level2

STEP 2 Adding Variables to Background

- Add 2 variable – Lives and Score
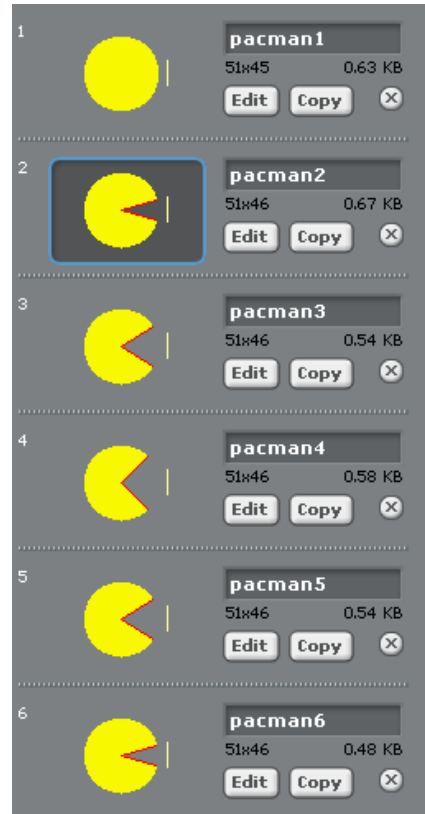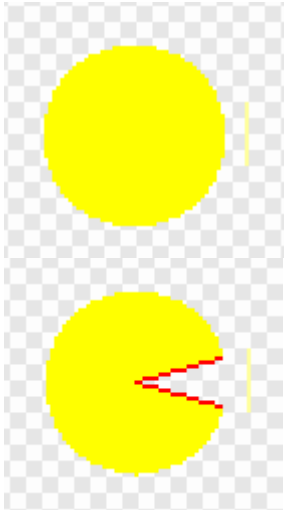- Add the code below to your background.

Variables: Code:

STEP 3 - PACMAN

Now for your Pacman character

(I have included this guy in the template as well with just a couple of costumes. You can add the extra ones if you like). **You will notice a faint yellow line to the right of the circle** *– this is to aid in touching the maze/other characters*
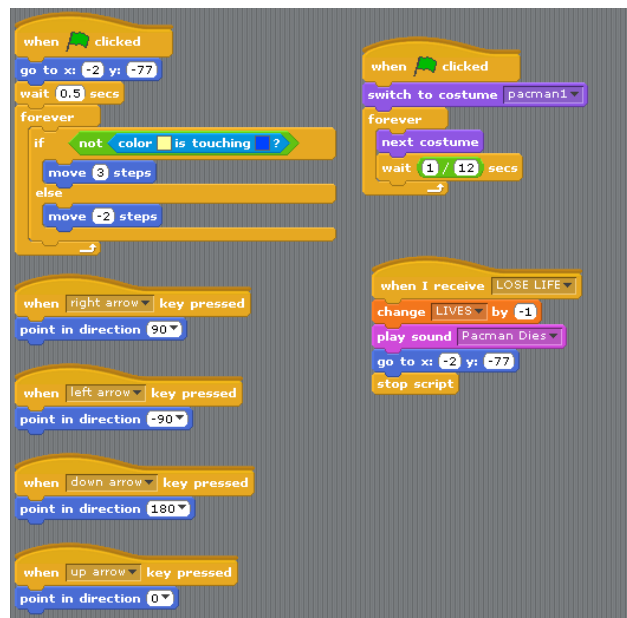
STEP 4 – Green and Red Blocks in Maze

- Now you need to add just a red and green block sprite that is placed on the maze as shown below. There is no code required for these blocks.
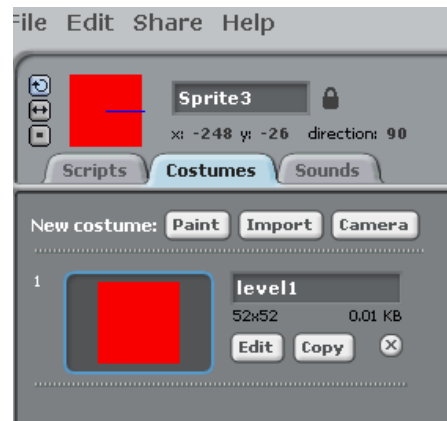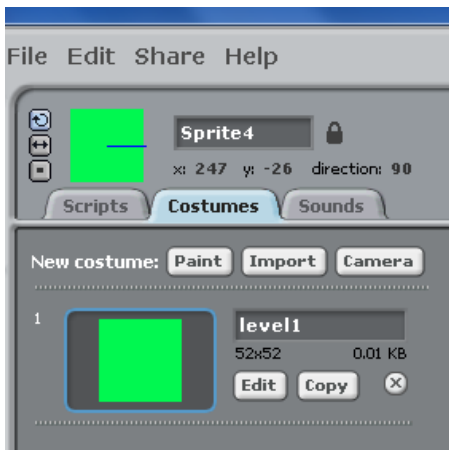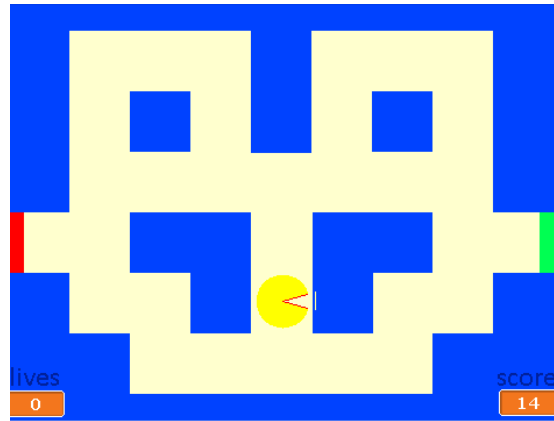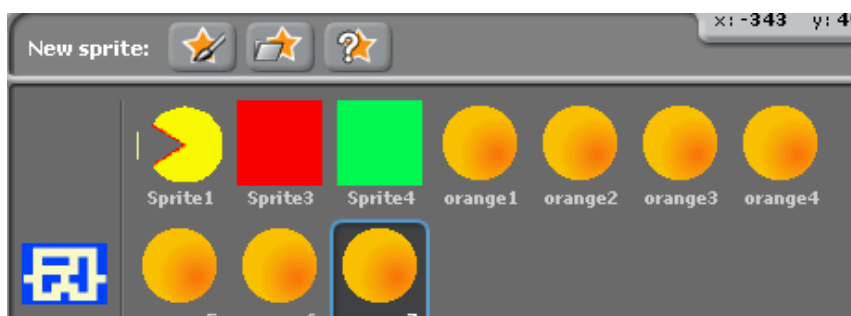
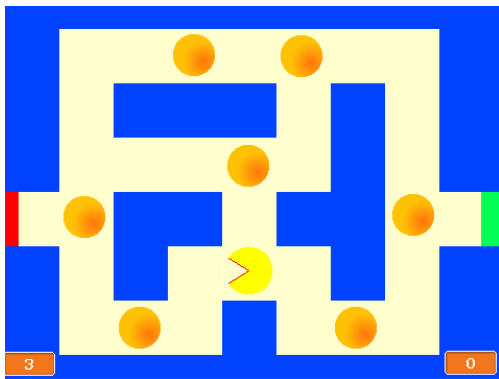**STEP 5 – PACMAN CODE** - Now add the following code to your pacman!!

STEP 5 – The Orange Lads

- You need to add about 7 or 8 of these circle sprites – just a plain orange circle sprite will do and then position them around the maze. (I am sure the Pacman guru's amongst you know the correct term for these orange fellas – please enlighten me ☺ !)
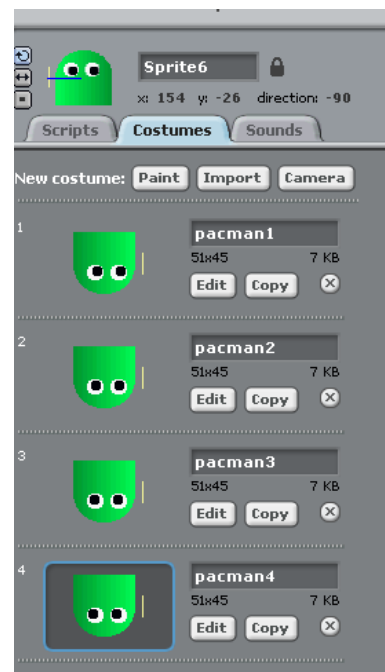
- Position the Oranges around the maze.

- Add the following code to each of your oranges!

STEP 6 – The Dodgy Guys

Now 2 more guys need to be added – these guys kill Pacman if he touches them. I have included these in the template also. They can have a number of costumes that help in their animation. Create your own or play around with these 2 guys.

- Add the following script to the Red guy!

```
when [flag] clicked
forever
    next costume
    wait 0.2 secs

when [flag] clicked
forever if < touching Sprite1 ? >
    broadcast LOSE LIFE and wait

when I receive game over
repeat 10
    wait 0.4 secs
    turn ↻ 15 degrees
    change size by -10
    change ghost effect by 10
hide
stop script
```

```
when [flag] clicked
hide
point in direction 90
set size to 100 %
set ghost effect to 0
go to x: -241 y: -26
wait 1 secs
show
forever
    if < not < color is touching ? > >
        move 3 steps
    else
        turn ↻ 90 * pick random 1 to -1 degrees
    if < SCORE = 14 >
        stop script
```

- And the following code to the Green Guy!

```
when [flag] clicked
forever
    next costume
    wait 0.2 secs

when [flag] clicked
forever if < touching Sprite1 ? >
    broadcast LOSE LIFE and wait
    show
    point in direction -90
    set size to 100 %
    set ghost effect to 0
    go to x: 241 y: -26

when I receive game over
repeat 10
    wait 0.4 secs
    turn ↻ 15 degrees
    change size by -10
    change ghost effect by 10
hide
stop all
```
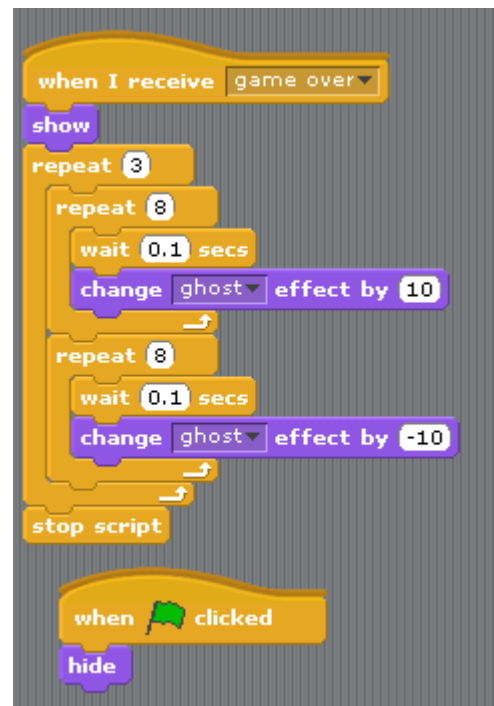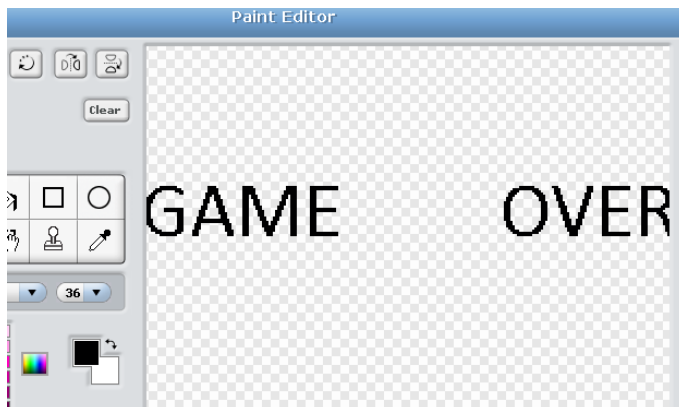
```
when [flag] clicked
hide
point in direction -90
set size to 100 %
set ghost effect to 0
go to x: 241 y: -26
wait 1 secs
show
forever
    if < not < color is touching ? > >
        move 3 steps
    else
        turn ↻ 90 * pick random 1 to -1 degrees
    if < SCORE = 14 >
        stop script
```

Your game should look something like this….
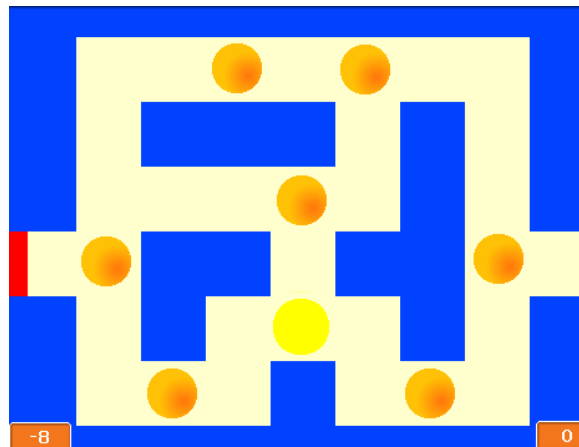
STEP 7 – GAME OVER

Finally you need to create a Game Over sprite.

This tutorial is based on a game created by MrDCO and downloaded from the http://scratch.mit.edu site. I have not tested the game completely so there may be some errors. Please let me know if you find any and we can update the tutorial.

Tutorial created by Margaret Deegan – email: clonakilty@coderdojo.com

Enjoy playing Pacman!!