CamJam EduKit Worksheet Eight

Project	Games!
Description	Computers and electronics are not just about having fun – you can play games as well!

Equipment Required

The circuit built in CamJam EduKit Worksheet Six.
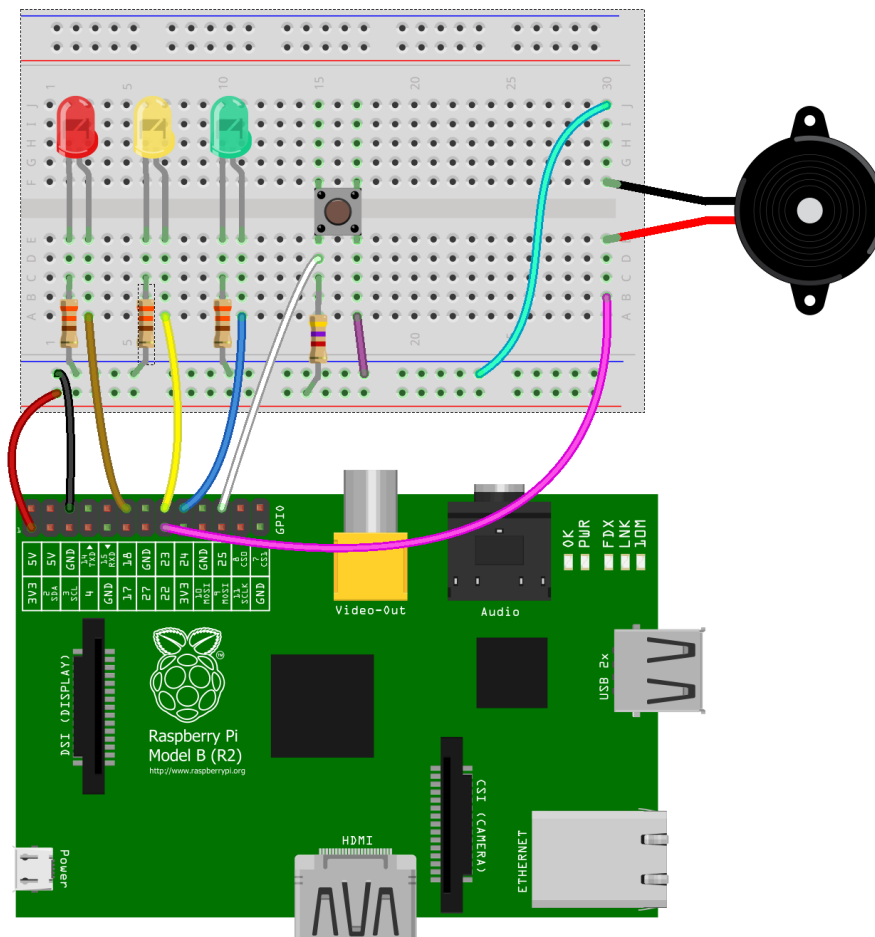
Exercise

In this worksheet, you're not going to be given any code. You're just going to given some ideas for games you can make and play using the CamJam EduKit, and some hints that you might need.

Hints

- Random numbers can be generated importing the random module (**import random**) then using the **random.random()** to generate a random number. This will generate a number

Exercise

between 0 and 1. So, to generate a number between 1 and 10, use the following example code:

```
import random

print "Random number between 1 and 10:"
print random.randint(1,10)
```

- Print out instructions for the user to the screen using the **print** command.

```
print "Tell the user what to do"
```

Game 1 – Reaction Timer

Light the LEDs one at a time, going from Red to Green with one second in between. After the green has been lit, wait a random length of time (say, between 1 and 5 seconds) before sounding the buzzer. Time how long it takes from the buzzer sounding to the player pressing the button.

Game 2 – Eat the Orange

Randomly choose which LED to light. Light it for 0.2 seconds. If the player presses the button while the Amber LED is lit, they get a point. Time how long it takes for them to get 10 points.

Game 3 – Segment of Orange

Change the colour of the LED from Red, to amber, to green, to amber and back to red every 0.1s. If the player presses the button when the amber LED it lit, they get a point. Only give them 10 chances to hit the button when the amber is lit.

Feedback to CamJam

If you think of any other games you can make and play with the CamJam EduKit, please let us know using the contact form on the CamJam EduKit website at http://camjam.me/edukit