

# Binary Decoder

This demo combines optical character recognition (OCR) with a little extra logic to decode binary numbers into their base 10 equivalent. **Note:** this application does not require a video camera. Instead, an input image is supplied in the demos directory (`binary_input.png`).

1. On the STEM-Kit, open a command terminal window and change directory to demos

```
pi@raspberrypi:~ $ cd demos
pi@raspberrypi:~/demos $
```

2. Execute the demo script as shown below. After the command prompt [`$`] type the following:

```
~/demos $ python module-6-demo-binary-decoder.py
```

3. The script will launch a window that shows the input image below.
4. These 3-digit codes are pretty simple to compute in your head, so give that a try.
5. When you are ready to process the image, type any key on the keyboard.
6. After a few seconds a new window will be displayed with the detected text and the decoded (base 10) result for each binary code.
7. To exit the program, select the any key on the keyboard.

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