OpenCV + Python setup

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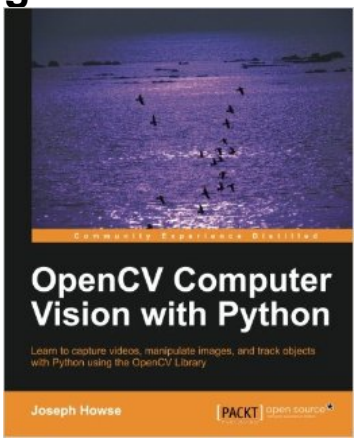
Import required packages

In [1]:
```
# Your solution here
```

Load and display the image shown below (`data/test.jpg`)



data/test.jpg

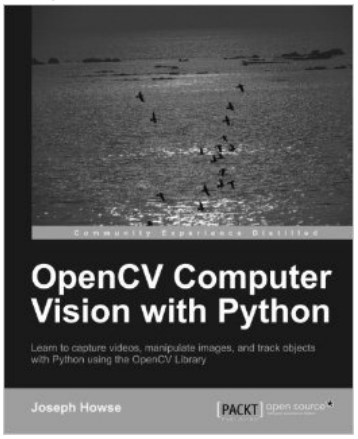
In [9]:
```
# Your solution here
```

Print image height and width and the number of channels

In [10]:
```
# Your solution here
```

Convert image to grayscale

After conversion, the image will look something like this.



In [4]:
```
# Your solution here
```

Print the height, width and the number of channels of the grayscale image

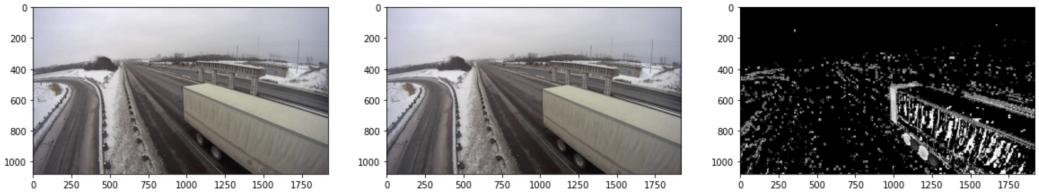
In [5]:
```
# Your solution here
```

Save the grayscale image to file `test_gray.jpg`

In [6]:
```
# Your solution here
```

Display the first frame from the video `data/traffic-short.mp4`

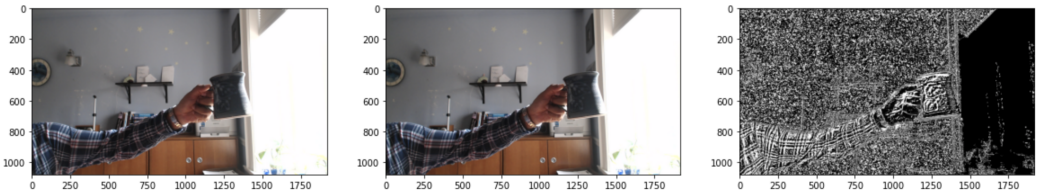
1. Open a video stream.
2. Read in the first frame.
3. Read in the second frame.
4. Find the differences between the two frames.
5. Display the first frame, the second frame and the differences as seen below.
6. Close the video stream



In [7]:
```
# Your solution here
```

Capture a frame from webcam

1. Open a camera stream.
2. Read in one frame.
3. Read in another frame.
4. Find the differences between the two frames.
5. Display the first frame, the second frame and the differences as seen below (your frames will be different).
6. Close the video stream



In [8]:
```
# Your solution here
```

In [ ]:
```

```