

Assignment -3
Python
Programming

Assignment Date	8 October 2022
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Question-1:

Write python code for blinking LED and Traffic lights for Raspberry pi.

Solution:

```
import RPi.GPIO as GPIO
import time
import
signal
import sys
```

```
# Setup
GPIO.setmode(GPIO.BCM)
GPIO.setup(9,
GPIO.OUT)
GPIO.setup(10,
GPIO.OUT)
GPIO.setup(11,
GPIO.OUT)
```

```
# Turn off all lights when user ends
demo def allLightsOff(signal, frame):
    GPIO.output(9,
False)
    GPIO.output(10,
False)
    GPIO.output(11,
False)
    GPIO.cleanup()
    sys.exit(0)
```

```
signal.signal(signal.SIGINT,
```

```
allLightsOff) # Loop forever
while True:
    # Red
    GPIO.output(9,
True) time.sleep(3)
```

```
    # Red and amber
```

```
GPIO.output(10,  
True) time.sleep(1)
```

```
# Green
```

```
GPIO.output(9,  
False)  
GPIO.output(10,  
False)  
GPIO.output(11,  
True) time.sleep(5)
```

```
# Amber  
GPIO.output(11,  
False)  
GPIO.output(10,  
True) time.sleep(2)
```

```
# Amber off (red comes on at top of loop)  
GPIO.output(10, False)
```