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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 all Lights Off(signal, frame):
       GPIO.output(9, False)
       GPIO.output(10, False)
       GPIO.output(11, False)
       GPIO.cleanup()
       sys.exit(0)
signal.signal(signal.SIGINT, all LightsOff)
# 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)