ASSIGNMENT 3

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PROJECT NAME	SMART WASTE MANAGEMENT SYSTEM IN METROPOLITAN CITIES

To initialize the GPIO ports on the Raspberry Pi we need to first import the Python library, the initialize the library and setup pin 8 as an output pin.

import RPi.GPIO as GPIO

Import Raspberry Pi GPIO library

from time import sleep

Import the sleep function from the time module

GPIO.setwarnings(False)

Ignore warning for now

GPIO.setmode(GPIO.BOARD)

Use physical pin numbering

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

Set pin 8 to be an output pin and set initial value to low (off)

Next we need to turn the LED on and off in 1 second intervals by setting the output pin to either high (on) or low (off). We do this inside a infinite loop so our program keep executing until we manually stop it.

while True:

Run forever

    GPIO.output(8, GPIO.HIGH)

Turn on

    sleep(1)

Sleep for 1 second

```
    GPIO.output(8, GPIO.LOW)
```

Turn off

```
    sleep(1)
```

Sleep for 1 second

Combining the initialization and the blink code should give you the following full Python program:

```
import RPi.GPIO as GPIO
```

Import Raspberry Pi GPIO library

```
from time import sleep
```

Import the sleep function from the time module

```
GPIO.setwarnings(False)
```

Ignore warning for now

```
GPIO.setmode(GPIO.BOARD)
```

Use physical pin numbering

```
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)
```

 # Set pin 8 to be an output pin and set initial value to low (off)

```
while True:
```

Run forever

```
 GPIO.output(8, GPIO.HIGH) # Turn on
```

```
 sleep(1)
```

Sleep for 1 second

```
 GPIO.output(8, GPIO.LOW)
```

Turn off

```
 sleep(1)
```

 # Sleep for 1 second