Ex – 17
Sending Email from Python

Problem

You want to send an email message from a Python program.

Solution

Python has a library for the Simple Mail Transfer Protocol (SMTP) that you can use to send emails:

```
pi@raspberrypi  ~ $ nano myemail.py
import smtplib
GMAIL_USER = 'your_name@gmail.com'
GMAIL_PASS = 'your_password'
SMTP_SERVER = 'smtp.gmail.com'
SMTP_PORT = 587
def send_email(recipient, subject, text):
    smtpserver = smtplib.SMTP(SMTP_SERVER, SMTP_PORT)
    smtpserver.ehlo()
    smtpserver.starttls()
    smtpserver.ehlo
    smtpserver.login(GMAIL_USER, GMAIL_PASS)
    header = 'To:' + recipient + '\n' + 'From: ' + GMAIL_USER
    header = header + '\n' + 'Subject:' + subject + '\n'
    msg = header + '\n' + text + ' \n\n'
    smtpserver.sendmail(GMAIL_USER, recipient, msg)
    smtpserver.close()
send_email('destination_email_address', 'sub', 'this is text')
```

To use this example to send an email to an address of your choice, first change the variables GMAIL_USER and GMAIL_PASS to match your email credentials. If you are not using Gmail, then you will also need to change the values of the SMTP_SERVER and possibly SMTP_PORT.

You also need to change the destination email address in the last line.

Discussion

The send_email message simplifies the use of the smtplib library into a single function that you can reuse in your projects.

Being able to send emails from Python opens up all sorts of project opportunities. For example, you could use a sensor such as the PIR sensor to send an email when movement is detected.

Running python script:

```
pi@raspberrypi  ~ $ python myemail.py
```