

EX - 13

Send SMS from a Python Script on the Raspberry Pi

Problem

This exercise can be used to send text messages to either individual numbers or entire contact groups.

Solution

```
pi@raspberrypi ~ $ nano mysms.py
```

```
#!/usr/bin/env python
import urllib.request
import urllib.parse
uname = 'bhuvaneshwaran@rajalakshmi.edu.in'
hashCode = '9890db2b86d4bf292adfc44fe0e19fc417e6f6a7'
sender = 'TXTLCL'
numbers = ('919791519152', '919994940914')
message = 'Test message sent from my Raspberry Pi'
def sendSMS(uname, hashCode, numbers, sender, message):
    data = urllib.parse.urlencode({'username': uname, 'hash': hashCode,
    'numbers': numbers, 'message' : message, 'sender': sender})
    data = data.encode('utf-8')
    request = urllib.request.Request("http://api.textlocal.in/send/?")
    f = urllib.request.urlopen(request, data)
    fr = f.read()
    return(fr)
resp = sendSMS(uname, hashCode, numbers, sender, message)
print (resp)
```

Running the python script:

```
pi@raspberrypi ~ $ python3 mysms.py
```

Discussion

sender	If you have a promotional account, do not send this parameter. If you have a transactional account, use this field to specify the sender name for your message. Sender name must be 6 alpha characters and should be pre-approved by Textlocal. In the absence of approved sender names, use the default 'TXTLCL'
message	The message content. This parameter should be no longer than 765 characters. See Helpful Information for message length details. The message also must be URL Encoded to support symbols like &.

Login Parameters	
username	The email address used to log into Textlocal.
hash	Your secure hash can be found within Messenger in the main navigation under " Help->All Documentation ". Alternatively you can use the password parameter instead and use your Textlocal password in plain text.
apiKey	This can be used instead of the username/hash/password. You can create them in your Messenger Control Panel (click here) for each application, and limit the usage of them by host IP Address.
Optional Parameters	
numbers	Comma-delimited list of mobile numbers in international format (i.e. 918123456789). Maximum of 10,000 numbers and error code 33 will be returned if exceeded.
group_id	This parameter can be used in place of the numbers parameter in order to send to an entire contact group. This parameter should contain the ID of the relevant group, which can found either within Messenger (in the "Reports" - "Advanced Reports" - "List of Group ID's" section) or by running the get_groups command. Additionally group 5 contains "contacts" and group 6 contains "opt-outs".
schedule_time	This parameter can be used to specify a schedule date/time for your message, which should be provided in Unix timestamp format. Times should be provided in GMT.
receipt_url	Use this field to specify an alternative URL to which the delivery receipt(s) will be sent. See handling receipts documentation.
custom	This value will be set against the message batch and

	will be passed back in the delivery receipts. This allows you to match delivery receipts to their corresponding messages.
optouts	Can be set to true in order to check against your own opt-outs list and Textlocal's global opt-outs database. Your message will not be sent to numbers within these lists. If not provided defaults to false .
validity	Can be set, up to 72 hours in advance, to say after which time, you don't want the message delivered. This should be in a <u>Unix timestamp</u> format.
unicode	Set this value to true to specify that your message body will contain unicode characters. See <u>Encoding/Decoding Unicode</u> Documentation
test	Set this field to true to enable test mode, no messages will be sent and your credit balance will be unaffected. If not provided defaults to false