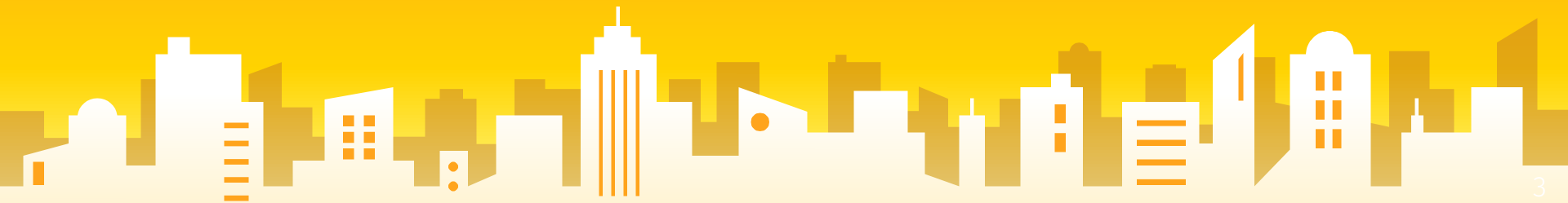
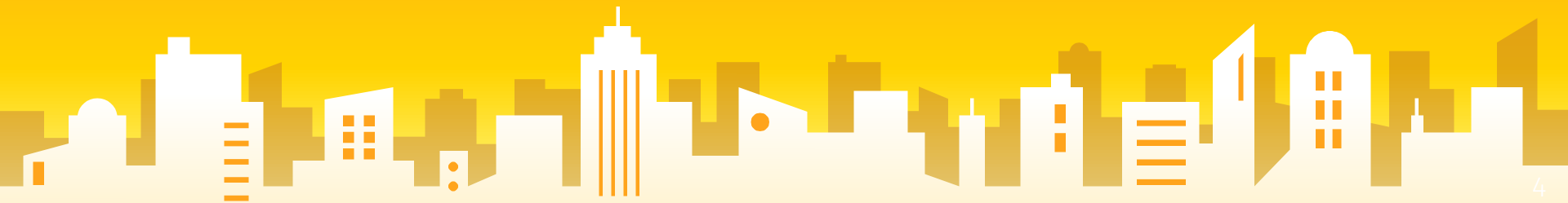
# Networking Continue in Python

First Lesson. (Most Important)



# Create a FTP client like FileZilla

Project



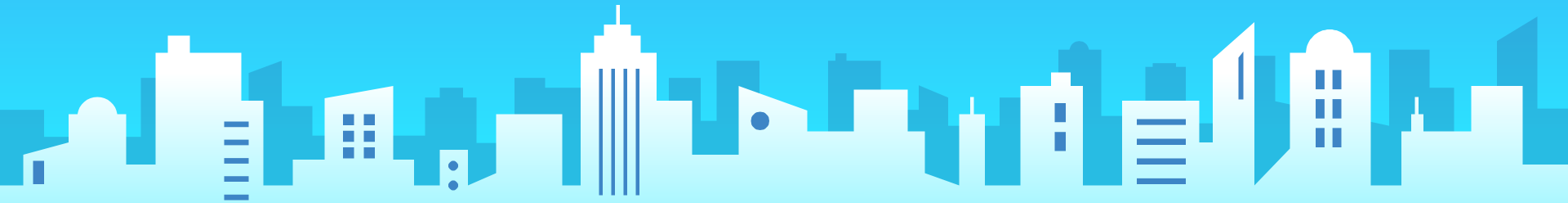
# ftplib

- A module for interacting with FTP servers
- Example : Capture a directory listing

```
>>> import ftplib
>>> f = ftplib.FTP("ftp.gnu.org","anonymous",
...                "dave@dabeaz.com")
>>> files = []
>>> f.retrlines("LIST",files.append)
'226 Directory send OK.'
>>> len(files)
15
>>> files[0]
'-rw-r--r--    1 0    0       1765 Feb 20 16:47 README'
>>>
```

# File Download

```
with open(FILENAME, 'wb') as fe:
    f.retrbinary('RETR ' + FILENAME, fe.write)
```

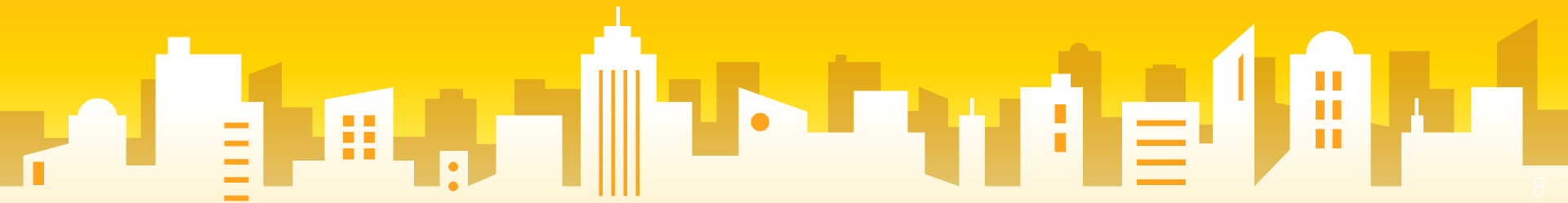


# Upload to a FTP Server

```
host     = "ftp.foo.com"
username = "dave"
password = "1235"
filename = "somefile.dat"

import ftplib
ftp_serv = ftplib.FTP(host,username,password)

# Open the file you want to send
f = open(filename,"rb")

# Send it to the FTP server
resp = ftp_serv.storbinary("STOR "+filename, f)

# Close the connection
ftp_serv.close()
```

# Create a SMTP client for mails

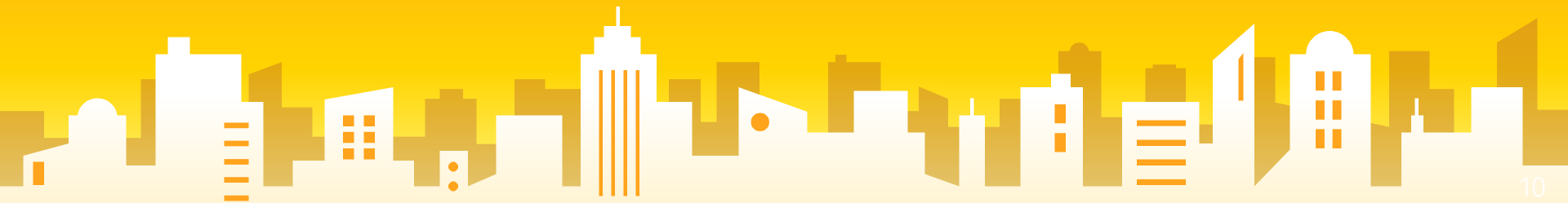
Project



```python
import smtplib

server = smtplib.SMTP_SSL('smtp.gmail.com', 465)
server.login("your username", "your password")
server.sendmail(
  "from@address.com",
  "to@address.com",
  "this message is from python")
server.quit()
```

# Create a SHH client like putty

Project

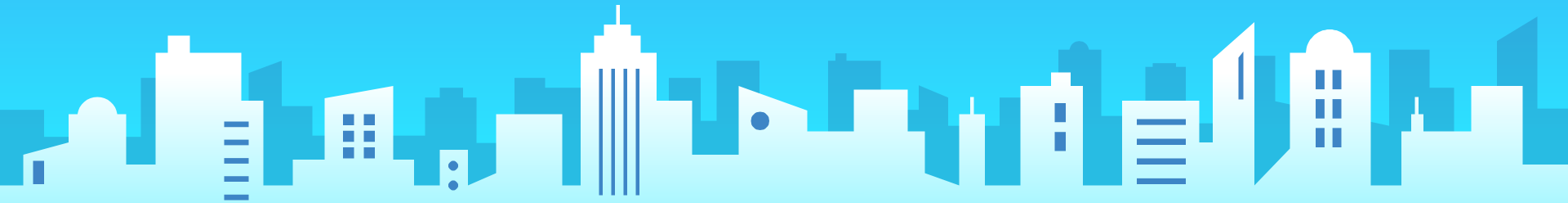


# SSH Connection

```
import paramiko

hostname = input('Enter hostname : ')
username = input('Enter Username : ')
password = input('Enter Password : ')
port = 22

client = paramiko.SSHClient()
client.load_system_host_keys()
client.set_missing_host_key_policy(paramiko.WarningPolicy)
client.connect(hostname,port=port,username=username,password
=password)
```

# SSH Connection

```
while True:
    command = input('Enter Command : ')
    if command == 'exit':
        client.close()
    else:
        stdin, stdout, stderr = client.exec_command(command)
        print(stdout.read().decode())
```



# OS Module

Second Lesson

## Get Current Directory

```
>>> import os

>>> os.getcwd()
'C:\\Program Files\\PyScripter'

>>> os.getcwdb()
b'C:\\Program Files\\PyScripter'
```

## Changing Directory

```
>>> os.chdir('C:\\Python33')

>>> print(os.getcwd())
C:\Python33
```

## List Directories and Files

```
>>> print(os.getcwd())
C:\Python33

>>> os.listdir()

>>> os.listdir('G:\\')
```

## Renaming a Directory or a File

```
>>> os.listdir()
['test']

>>> os.rename('test','new_one')

>>> os.listdir()
['new_one']
```

## Removing Directory or File

```
>>> os.listdir()
['new_one', 'old.txt']

>>> os.remove('old.txt')
>>> os.listdir()
['new_one']

>>> os.rmdir('new_one')
>>> os.listdir()
[]
```

# Removing Non Empty Directory or File

```
>>> os.listdir()
['test']

>>> os.rmdir('test')
Traceback (most recent call last):
...
OSError: [WinError 145] The directory is not empty: 'test'

>>> import shutil

>>> shutil.rmtree('test')
>>> os.listdir()
[]
```

# Thank you

# Miss You...