**Send email using python:**

What if you want to send an email without using gmail client? You want to create your own client using python – yes, that’s possible.

We can do automate lot of stuff. Think of alarm clock which is scheduled to run everyday without the need to set it everyday for the same time. Discuss about automation- backups, service health checks, clearing the garbage from the machines and sending emails etc.. we can do all of this using python : to know more: <https://automatetheboringstuff.com/>

* In this lecture let’s see how to send an email using python. Note: this is not a secure way of doing it, we are doing it for learning purpose.

1. Make sure your default is python3 – how to check it? – python –version will give you the output as python 3.x in your IDE

At the time of writing this document 20th May 2022. By default my IDE is running python3.x

Text

Description automatically generated

* If you can’t see the same, recommend you to do some research on how to make python3 as default, else run the file with python3.x

Let’s look at the program

To send an email we need a username and password: create a dummy user account in gmail and make a note of the id: [dummyusername@gmail.com](mailto:dummyusername@gmail.com) and password is: dummy$password

1. Login function is used to login where we use our dummy credentials
2. To send an email we will use sendmail function which will take 3 values a)who is sending the email a.k.a **sender** b) to whom we are sending the email a.k.a **receiver** c) what message are we sending – **actual message**

At the moment your code looks something like this, and if we run it we will get an error as you have guessed. Login and sendmail looks like something is wrong with them.

Graphical user interface, text

Description automatically generated

Can we fix it? What do you think we need to fix the issue? I am expecting an actual answer but in general as we know that we need -------/---------

Python does support external libraries as we have discussed and we are going to use the only library ***smtplib*** . what is SMTP <https://postmarkapp.com/guides/everything-you-need-to-know-about-smtp>

FTP - for files transfer. It’s not secure DO NOT use it. Prefer SCP(secure copy) or other secure protocols.

HTTP – for web traffic which is unsecure, go for HTTPS with TLS1.2

To send packets we use TCP or UDP, similarly to send emails we use SMTP.

* If you look at our objective, we are sending an email ONLY, we are not receiving an email. If you want to receive an email we can use IMAP or POP

1. Import smtplib
2. We need to create a server which will contain smtplib.SMTP(class) for which we will pass a) server address which is the SMTP address for the gmail(***smtp.gmail.com***) and b)port number -***587***. This server address and port number will change based on which service we are using
3. Let’s update our login and sendmail as server.login and server.sendmail and run the file ***python3 maildemo.py*** – take a look at the output

A screenshot of a computer

Description automatically generated with medium confidence

Take a look at the error message: SMTP AUTH extension not supported by the server. The problem is before sending an email we have to make sure that we have a connection established. How do we do it or how do we create a connection ? – add ***server.starttls()*** as shown below. Discuss TLS

A screenshot of a computer

Description automatically generated with medium confidence

Run the above code and if it gives error, troubleshoot it. It should work and we should receive an email to the receiver mailbox.

NOTE: when we use gmail with python/IDE which is a non google/gmail service so by default gmail will block it, so we need to manage the receiver google account. Navigate to gmail account🡪 manage google account🡪 Security 🡪 Less security app access (turn it ON) as highlighted below.

Do it for testing purpose and turn it off after the testing. Otherwise leave the default settings as they are which is recommended.

Graphical user interface, text, application, email

Description automatically generated

* If you are interested to explore more on this, try to look at how to send an attachment, update the subject of the email.

What after Python?

Create or work on projects – It can be small like calculator or a cargame, snakegame or tictactoe etc..

Change logic and write the same programs again

**Practice**

If found this resource useful: <https://automatetheboringstuff.com/> using it you can learn the automation using python.