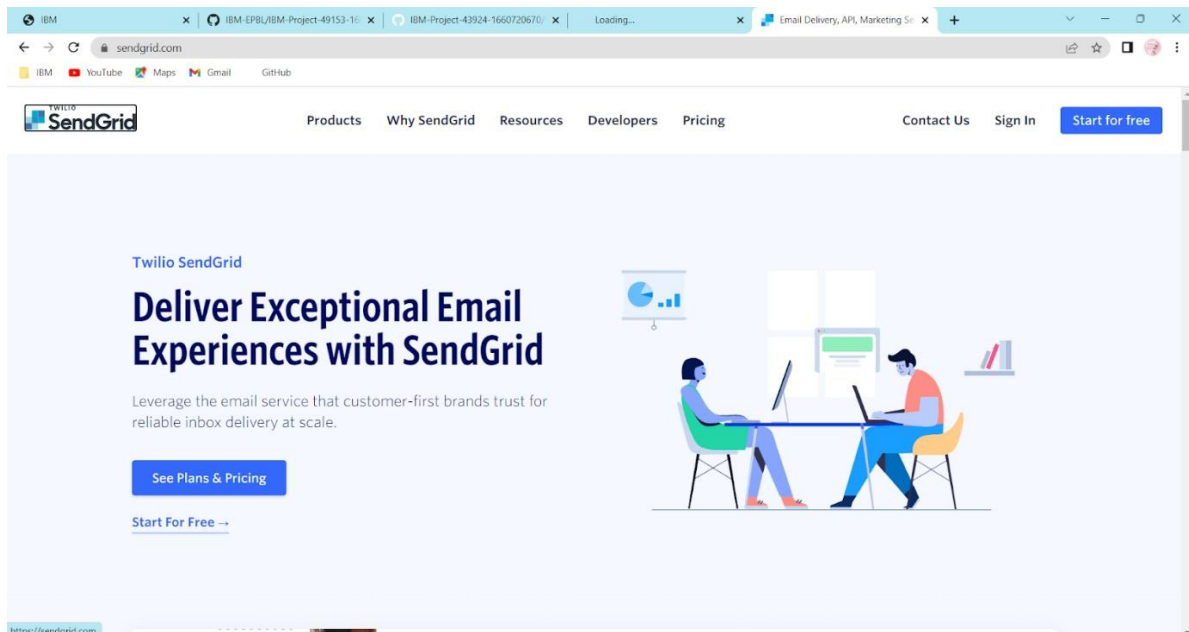


# INTEGRATING SENDGRID SERVICE

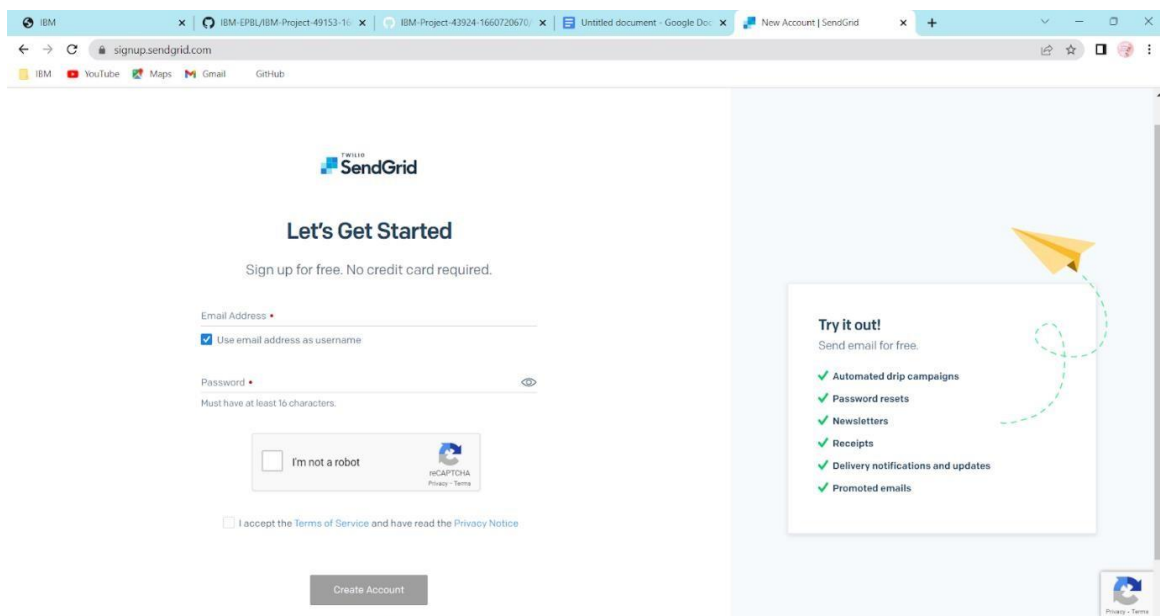
## SENDGRID INTEGRATION WITH PYTHON CODE

TEAM ID	PNT2022TMID02772
PROJECT NAME	Smart Fashion Recommender Application

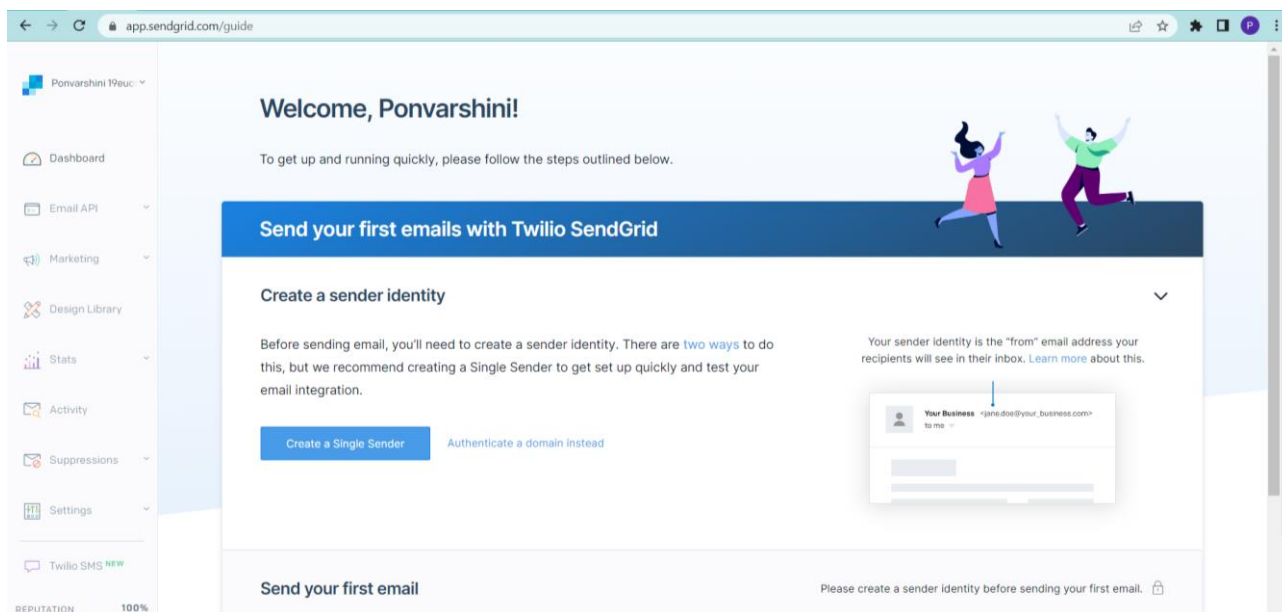
Navigate to <https://sendgrid.com> and click on start for free



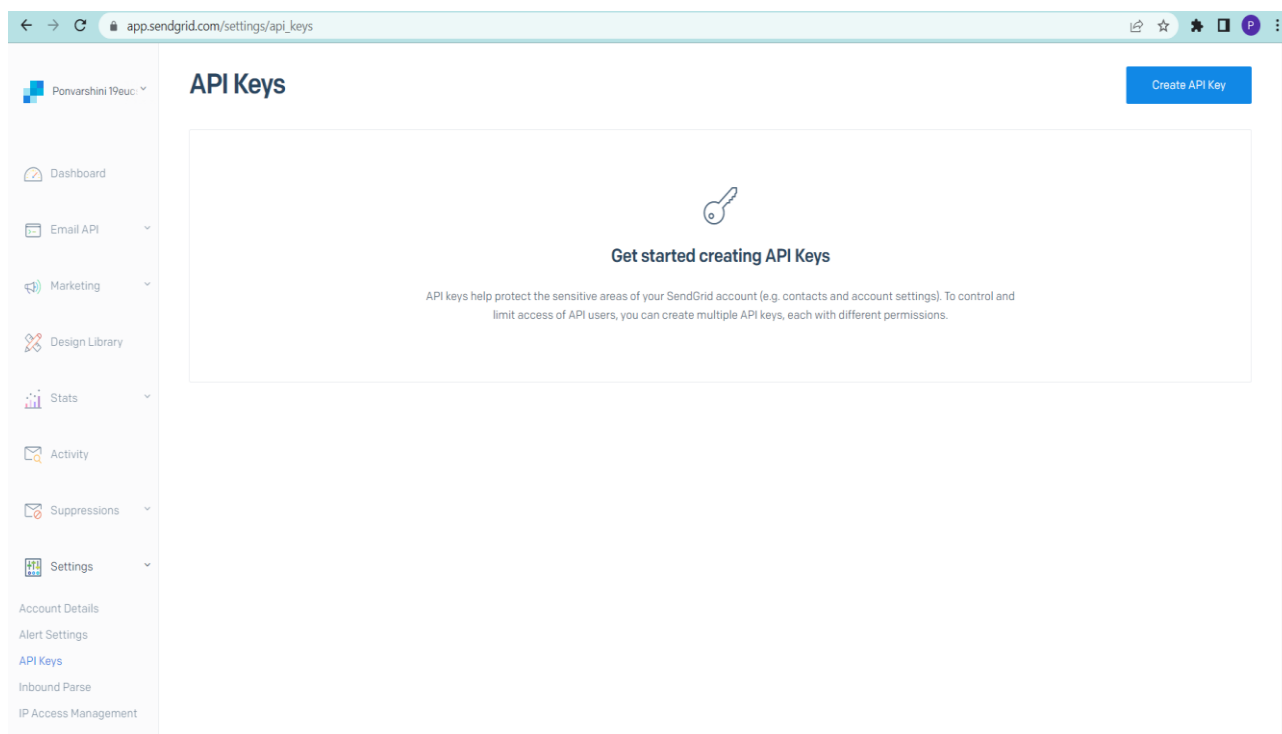
The below page appears as we click on start for free, fill email address and set a password of 16 digits and click on “Create Account”.

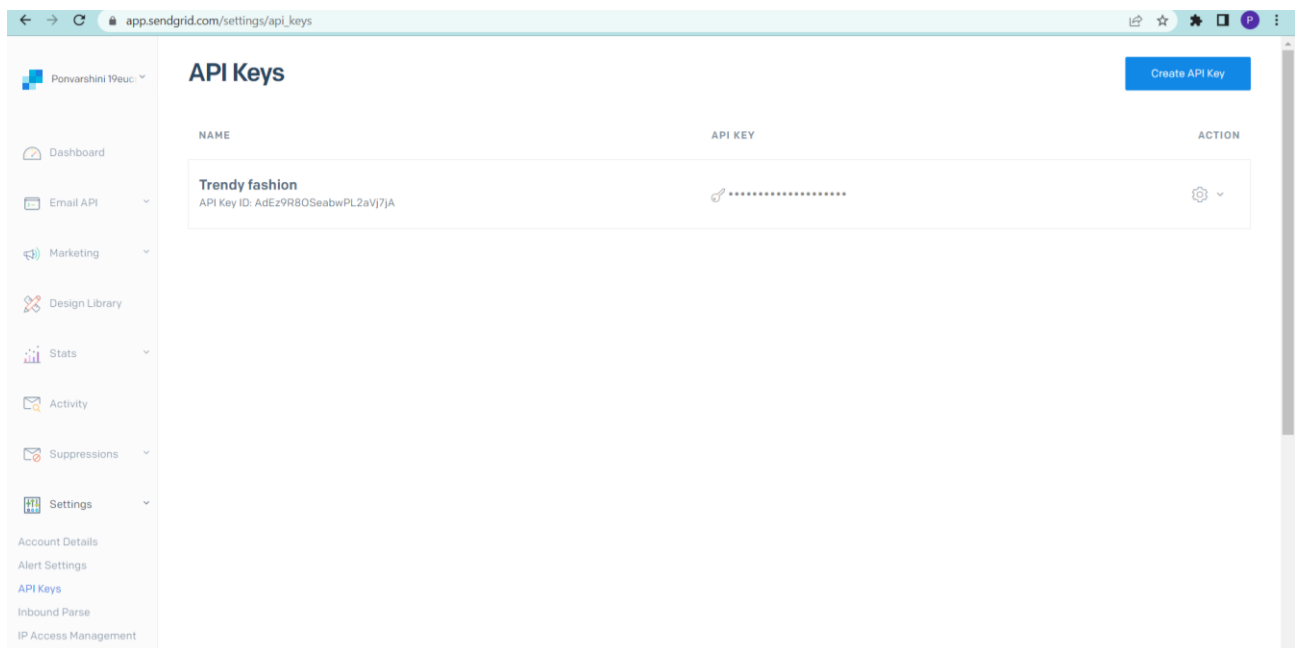


Add on additional information being asked and click on “Get Started”.

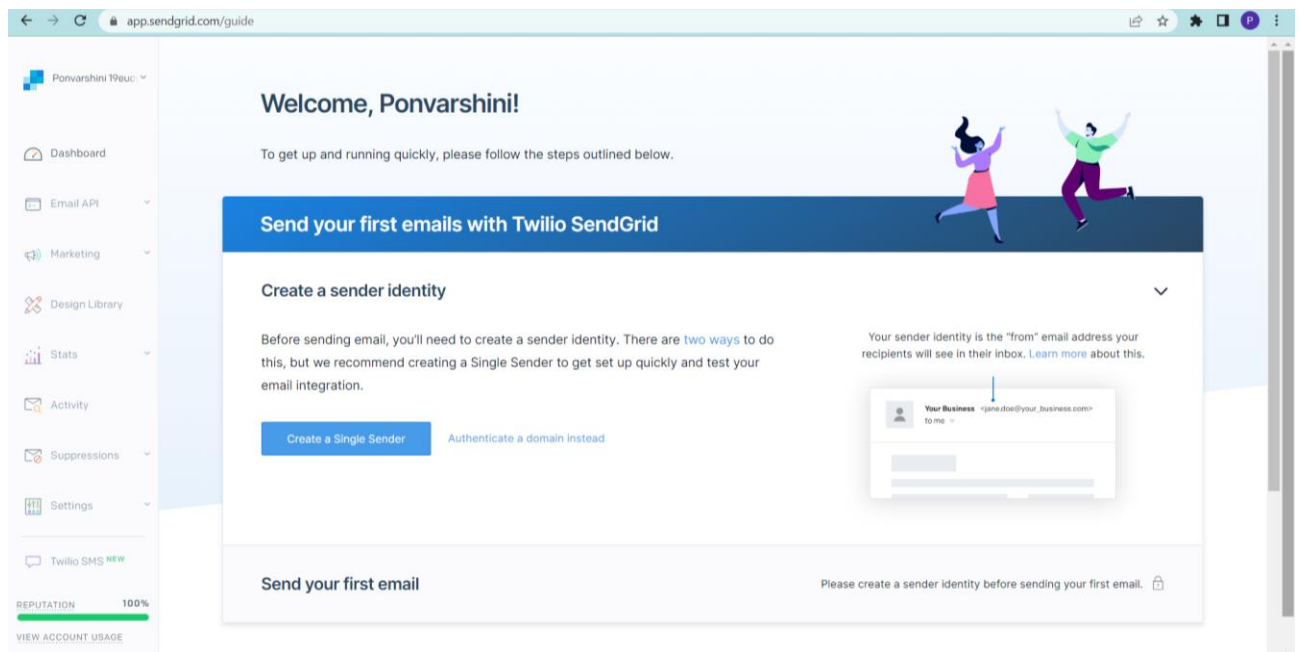


## Creating API Keys to Create a Sender Identity





Account is being created and the dashboard looks as below,



## Install sendgrid in PowerShell:

```
Administration: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Windows\system32> pip install sendgrid
Collecting sendgrid
  Downloading sendgrid-6.9.7-py3-none-any.whl (181 kB)
    ----- 101.2/101.1 kB 447.4 kB/s eta 0:00:00
Collecting python-http-client<3.2.1
  Downloading python_http_client-1.1.1-py3-none-any.whl (8.4 kB)
Collecting starkbank-ecdsa<2.0.1
  Downloading starkbank-ecdsa-2.2.0.tar.gz (14 kB)
  Preparing metadata (setup.py) ... done
Installing collected packages: starkbank-ecdsa, python-http-client, sendgrid
  DEPRECATION: starkbank-ecdsa is being installed using the legacy 'setup.py install' method, because it does not have a 'pyproject.toml' and the 'wheel' package is not installed. pip 23.1 will enforce this behaviour change. A possible replacement is to enable the '--use-pep517' option. Discussion can be found at https://github.com/pypa/pip/issues/8559
  Running setup.py install for starkbank-ecdsa ... done
Successfully installed python-http-client-3.3.7 sendgrid-6.9.7 starkbank-ecdsa-2.2.0

[notice] A new release of pip available: 22.3 -> 22.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip
PS C:\Windows\system32>
```

## Single Sender Verification:

app.sendgrid.com/settings/sender\_auth/senders/new

Sender Authentication / Single Sender Verification ⓘ

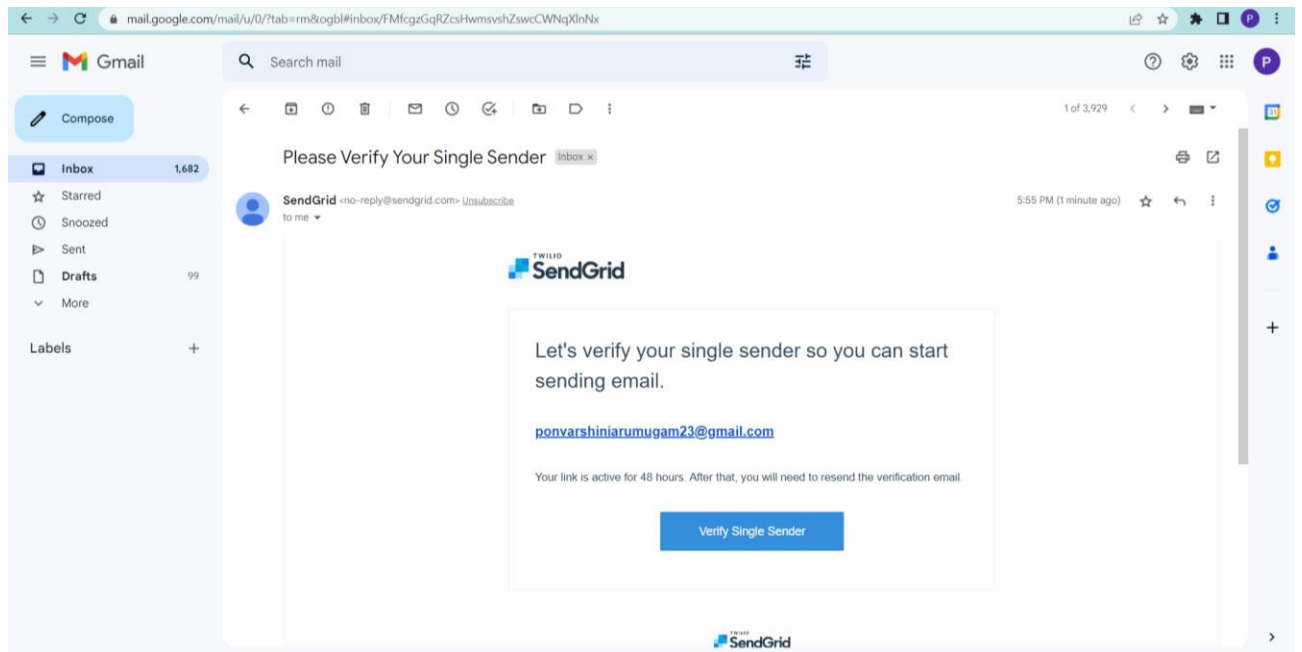
SENDERS	ADDRESS
<b>Ponvarshini</b> FROM: ponvarshiniarumugam23@gmail.com REPLY: mohamedasim71@gmail.com	Sri Krishna College of E Coimbatore, 641008 IN

**Sender has been created**

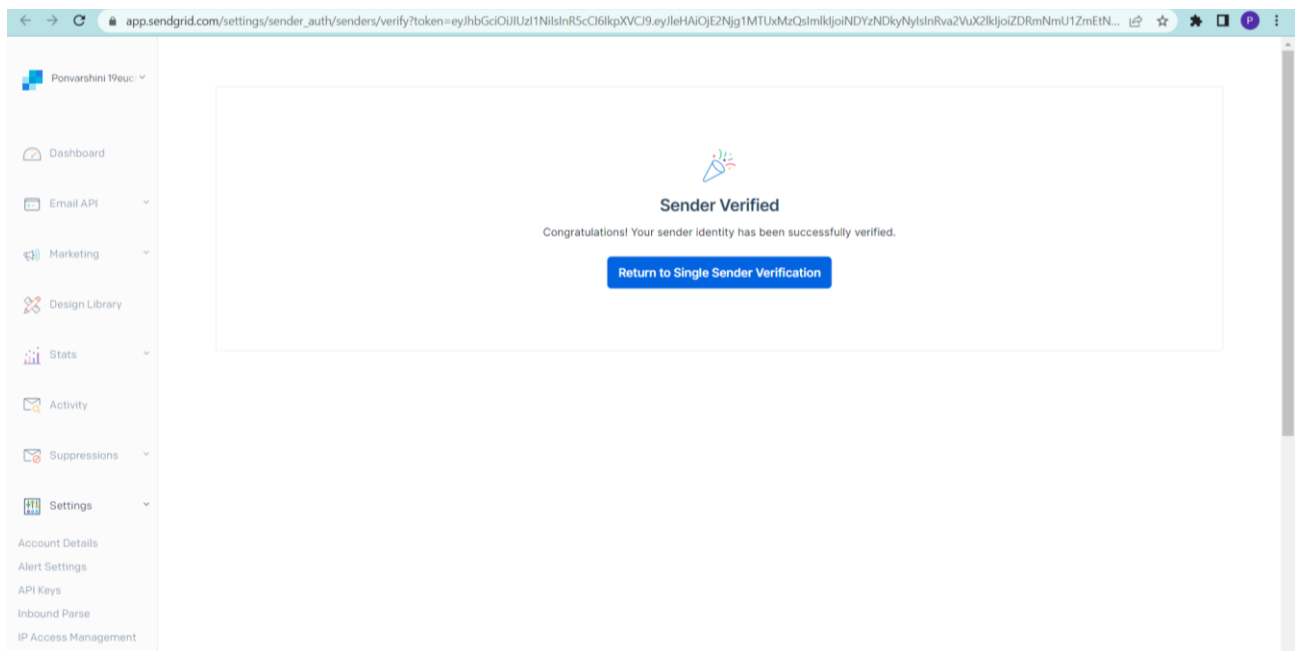
To verify sender identity, check your inbox at ponvarshiniarumugam23@gmail.com.

Resend email Close

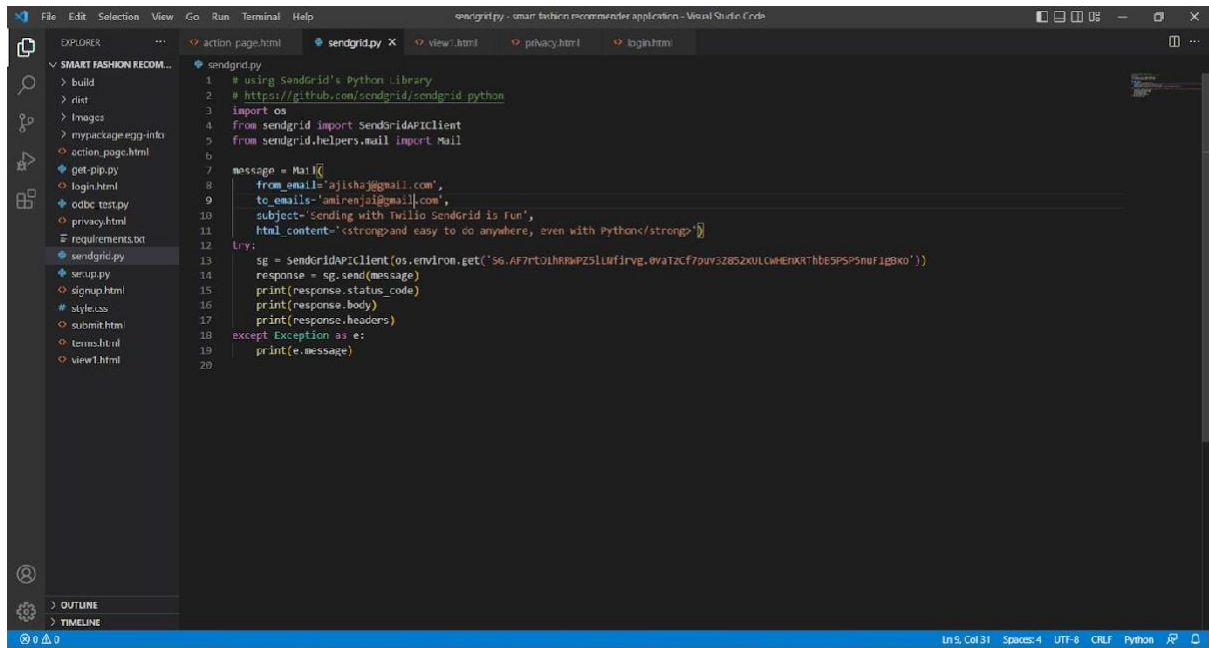
## Verifying Single Sender in Sendgrid:



Now, Single Sender Identity is verified successfully:



## Sendgrid integration with Python Code:



The screenshot shows a Visual Studio Code editor window titled "sendgrid.py - smart fashion recommender application - Visual Studio Code". The Explorer sidebar on the left shows a project structure for "SMART FASHION RECOMMENDER APPLICATION" with files like build, dist, Images, mypackage.egg-info, action\_page.html, get\_pip.py, login.html, odbc\_test.py, privacy.html, requirements.txt, sendgrid.py, setup.py, signup.html, styles.css, submit.html, terms.html, and view1.html. The main editor area displays the content of "sendgrid.py", which is a Python script for sending an email via SendGrid. The script includes comments about using the SendGrid Python library and a link to the GitHub repository. It imports the SendGrid client and Mail classes, constructs an email message with a specific subject and HTML content, and sends it using the client. The script also includes error handling for exceptions.

```
1 # using SendGrid's Python Library
2 # https://github.com/sendgrid/sendgrid-python
3 import os
4 from sendgrid import SendGridAPIClient
5 from sendgrid.helpers.mail import Mail
6
7 message = Mail(
8     from_email='ajisha@gmail.com',
9     to_emails='laminrenjai@gmail.com',
10    subject='Sending with Twilio SendGrid is Fun',
11    html_content='<strong>and easy to oo anywhere, even with Python</strong>')
12
13 try:
14     sg = SendGridAPIClient(os.environ.get('SG_API_KEY'))
15     response = sg.send(message)
16     print(response.status_code)
17     print(response.body)
18     print(response.headers)
19 except Exception as e:
20     print(e.message)
```

The status bar at the bottom indicates the current position is "Ln 5, Col 31", with "Spaces: 4", "UTF-8", "CRLF", and "Python" file encoding and language settings.