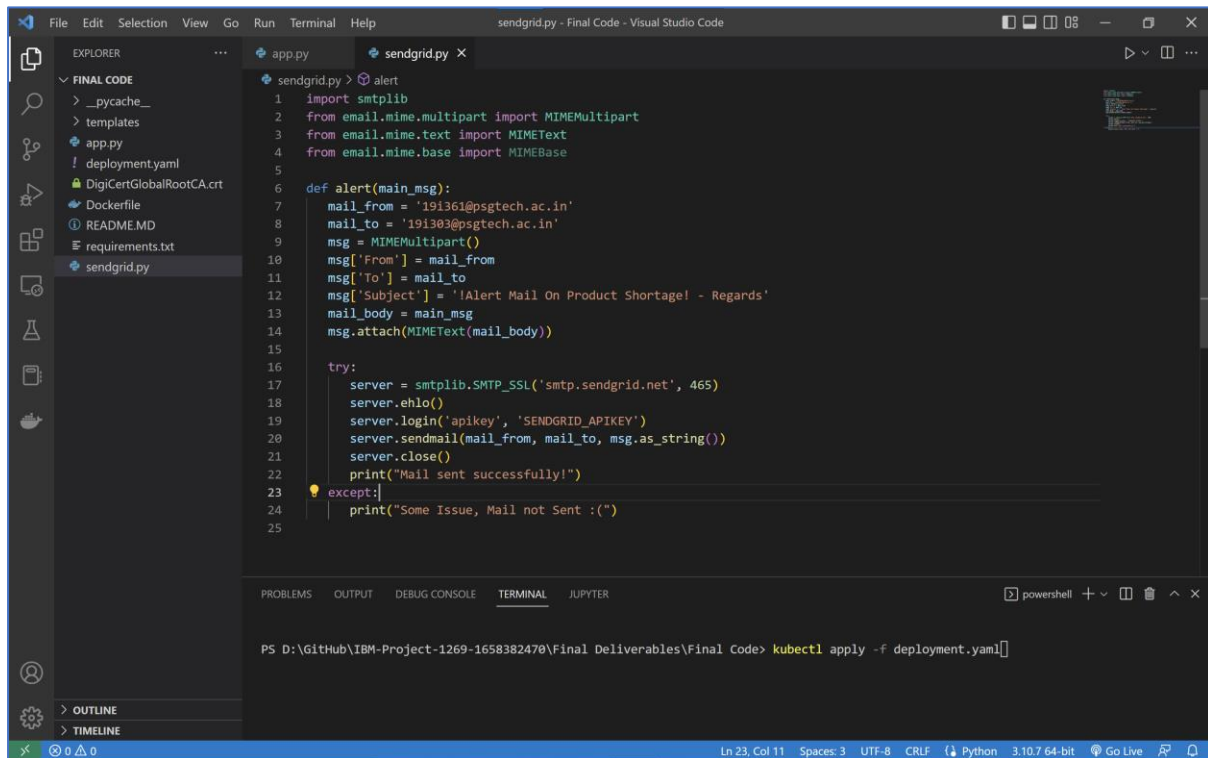


## Pre-Development Phase Integrating SendGrid Service

Date	14.11.2022
Team ID	PNT2022TMID13093
Project Name	Inventory Management System for Retailers

### SendGrid Integration with Python Code,

The screenshot shows the Visual Studio Code editor with a Python file named 'sendgrid.py'. The code defines an 'alert' function that sends an email via SendGrid. The function takes 'main\_msg' as an argument and sets the 'from' and 'to' fields to '191361@psgtech.ac.in' and '191303@psgtech.ac.in' respectively. The subject is 'Alert Mail On Product Shortage! - Regards' and the body is 'main\_msg'. The code uses the 'smtplib' library to connect to the SendGrid SMTP server (smtp.sendgrid.net) on port 465. It logs in with the 'SENDGRID\_APIKEY' and sends the email. A success message is printed if the email is sent successfully, and an error message is printed if it fails. The terminal at the bottom shows the command 'kubectl apply -f deployment.yaml' being executed in a PowerShell session.

```
1 import smtplib
2 from email.mime.multipart import MIMEMultipart
3 from email.mime.text import MIMEText
4 from email.mime.base import MIMEBase
5
6 def alert(main_msg):
7     mail_from = '191361@psgtech.ac.in'
8     mail_to = '191303@psgtech.ac.in'
9     msg = MIMEMultipart()
10    msg['From'] = mail_from
11    msg['To'] = mail_to
12    msg['Subject'] = 'Alert Mail On Product Shortage! - Regards'
13    mail_body = main_msg
14    msg.attach(MIMEText(mail_body))
15
16    try:
17        server = smtplib.SMTP_SSL('smtp.sendgrid.net', 465)
18        server.ehlo()
19        server.login('apikey', 'SENDGRID_APIKEY')
20        server.sendmail(mail_from, mail_to, msg.as_string())
21        server.close()
22        print("Mail sent successfully!")
23    except:
24        print("Some Issue, Mail not Sent :(")
25
```

Here the SENDGRID\_APIKEY must be substituted with the Unique API Key which will be provided when SendGrid Account is Created.

**Note:** For Security reasons, here we did not expose our SendGrid API Key.