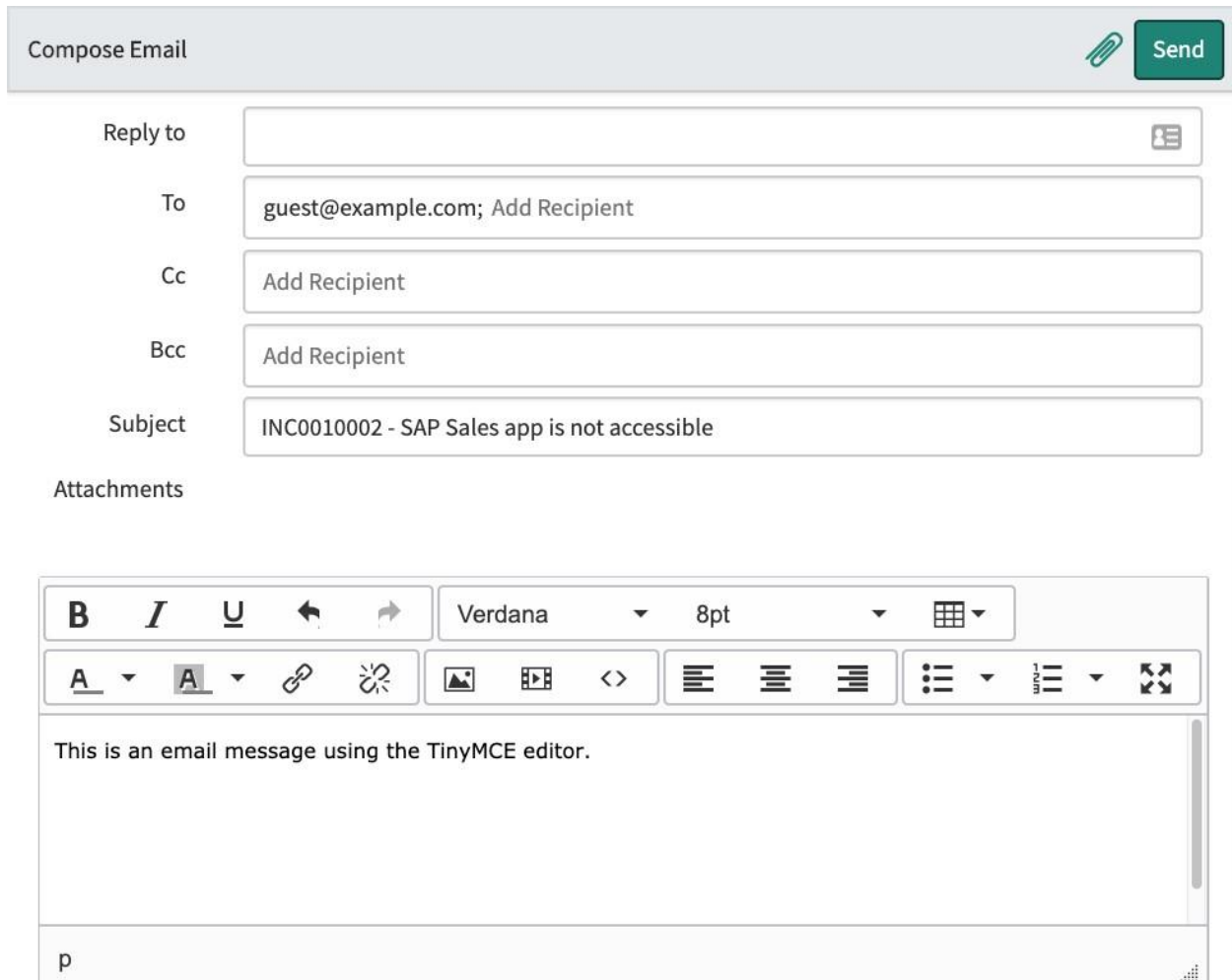**Question 1. Design the Tkinter GUI interface for sending the mail using Gmail. All students have to configure this problem with their own Gmail accounts and have to attach snapshots of received mail in their particular Gmail account by using this interface.**

Sample Interface:

from tkinter import *

from tkinter import ttk

import smtplib

import webbrowser

```python
def sendemail():
    try:

        sender = account.get()
        recepient = [receiver.get()]
        sub = subject.get()
        pswrd = password.get()
        msg = msgbody.get('1.0','end')
        msgtosend = """\
From: %s
To: %s
Subject: %s
%s
""" % (sender, recepient, sub, msg)
        mail = smtplib.SMTP('smtp.gmail.com',587)
        mail.starttls()
        mail.login(sender, pswrd)
        mail.sendmail(sender, recepient, msgtosend)
        mail.close()


        ttk.Label(mainframe, text="Email sent successfully").grid(column=4,row=9,sticky=W)


    except Exception as e:
        ttk.Label(mainframe, text=str(e)).grid(column=4,row=9,sticky=W)


def setup(event):
    webbrowser.open_new(r"https://www.google.com/settings/security/lesssecureapps")
```

```python
root = Tk()
root.title("Send an Email via Gmail !!")

mainframe = ttk.Frame(root, padding="3 3 12 12")
mainframe.grid(column=0, row=0, sticky=(N, W, E, S))
mainframe.columnconfigure(0, weight=1)
mainframe.rowconfigure(0, weight=1)

account = StringVar()
password = StringVar()
receiver = StringVar()
subject = StringVar()
msgbody = StringVar()

a = Label(mainframe, text="To use this app turn this setting ON for your account", fg="blue",
cursor="hand2")
a.grid(columnspan=2,column=3, row=0, sticky=W)
a.bind("<Button-1>", setup)



ttk.Label(mainframe, text="Your Email Account: ").grid(column=0, row=1, sticky=W)
account_entry = ttk.Entry(mainframe, width=30, textvariable=account)
account_entry.grid(column=4, row=1, sticky=(W, E))

ttk.Label(mainframe, text="Your Password: ").grid(column=0, row=2, sticky=W)
password_entry = ttk.Entry(mainframe, show="*", width=30, textvariable=password)
password_entry.grid(column=4, row=2, sticky=(W, E))

ttk.Label(mainframe, text="Recepient's Email Account: ").grid(column=0, row=3, sticky=W)
```

```python
receiver_entry = ttk.Entry(mainframe, width=30, textvariable=receiver)
receiver_entry.grid(column=4, row=3, sticky=(W, E))


ttk.Label(mainframe, text="Let's Compose").grid(column=2, row=5, sticky=W)


ttk.Label(mainframe, text="Subject: ").grid(column=0, row=6, sticky=W)
subject_entry = ttk.Entry(mainframe, width=30, textvariable=subject)
subject_entry.grid(column=4, row=6, sticky=(W, E))


ttk.Label(mainframe, text="Message Body: ").grid(column=0, row=7, sticky=W)
msgbody = Text(mainframe, width=30, height=10)
msgbody.grid(column=4, row=7, sticky=(W, E))


ttk.Button(mainframe, text="Send Email", command=sendemail).grid(column=4,row=8,sticky=E)


for child in mainframe.winfo_children(): child.grid_configure(padx=5, pady=5)


account_entry.focus()


root.mainloop()
```

output

```
abc.py - C:\Users\rahul\AppData\Local\Programs\Python\Python37-32\abc.py (3.7.3)
File  Edit  Format  Run  Options  Window  Help
from tkinter import *
from tkinter import ttk

import smtplib
import webbrowser

def sendemail():
    try:

        sender = account.get()
        recipient = [receiver.get()]
        sub = subject.get()
        pswrd = password.get()
        msg = msgbody.get('1.0','end')
        msgtosend = """\
        From: %s
        To: %s
        Subject: %s
        %s
        """ % (sender, recipient, sub, msg)
        mail = smtplib.SMTP('smtp.gmail.com',587)
        mail.starttls()
        mail.login(sender, pswrd)
        mail.sendmail(sender, recipient, msgtosend)
        mail.close()

        ttk.Label(mainframe, text="Email sent successfully").grid(column=4,row=9,sticky=W)

    except Exception as e:
        ttk.Label(mainframe, text=str(e)).grid(column=4,row=9,sticky=W)

def setup(event):
    webbrowser.open_new(r"https://www.google.com/settings/security/lesssecureapps")

root = Tk()
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mainframe.rowconfigure(0, weight=1)

account = StringVar()
password = StringVar()
receiver = StringVar()
subject = StringVar()
msgbody = StringVar()

a = Label(mainframe, text="To use this app turn this setting ON for your account", fg="blue", cursor="hand2")
a.grid(columnspan=2,column=3, row=0, sticky=W)
a.bind("<Button-1>", setup)

ttk.Label(mainframe, text="Your Email Account: ").grid(column=0, row=1, sticky=W)
account_entry = ttk.Entry(mainframe, width=30, textvariable=account)
account_entry.grid(column=4, row=1, sticky=(W, E))

ttk.Label(mainframe, text="Your Password: ").grid(column=0, row=2, sticky=W)
password_entry = ttk.Entry(mainframe, show="*", width=30, textvariable=password)
password_entry.grid(column=4, row=2, sticky=(W, E))
```

```
"Python 3.7.3 Shell"
File  Edit  Shell  Debug  Options  Window  Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 21:26:53) [MSC v.1916 32 bit (Inte
l)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:\Users\rahul\AppData\Local\Programs\Python\Python37-32\abc.py ==
```

Send an Email via Gmail !!

To use this app turn this setting ON for your account

Your Email Account:	uic18mca8035@gmail.com
Your Password:	**********
Recepient's Email Account:	uic18mca8049@gmail.com
	Let's Compose
Subject:	advance embeded programing
Message Body:	hello welcome to chandigarh university

Send Email

(535, b'5.7.8 Username and Password not accepted. Learn more at\n5.7.8 https://support.google.com/mail/?p=BadCredentials g9sm1836539pgc.46 - gsmtp')