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CCN Experiment 5

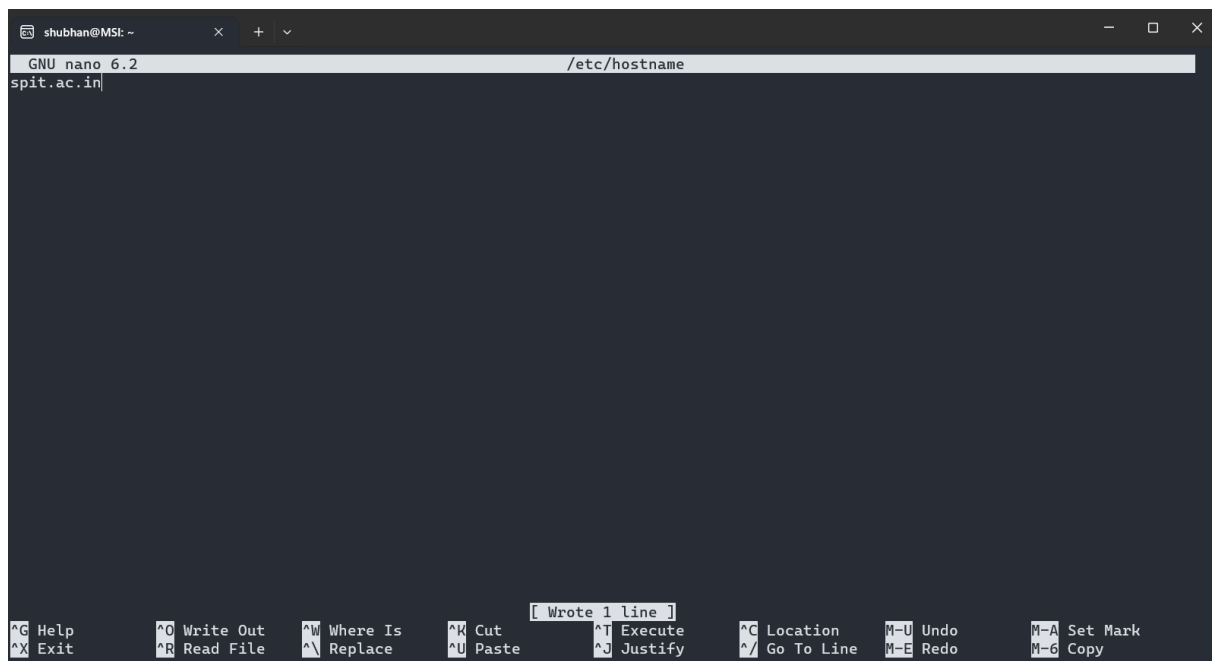
SMTP

1. Change domain name to custom username using hostname command.



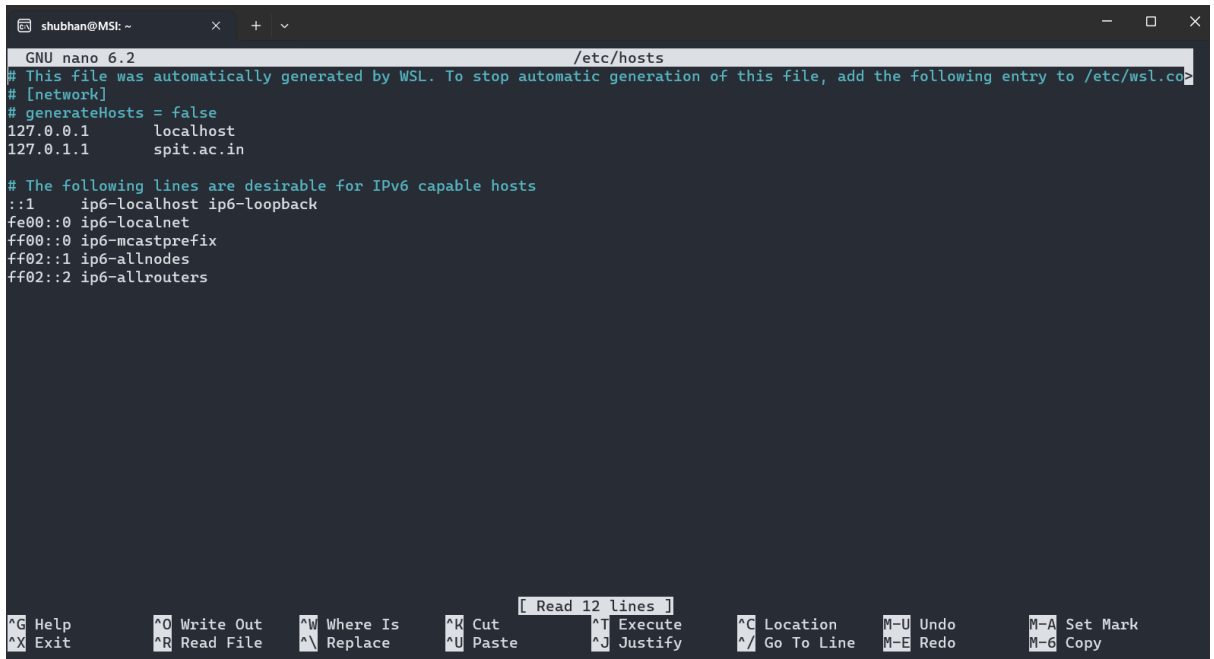
```
shubhan@MSI: ~  
shubhan@MSI:~$ sudo hostname spit.ac.in  
shubhan@MSI:~$
```

2. Step 3: Run sudo nano /etc/hostname Command And Enter Domain And Save The File.



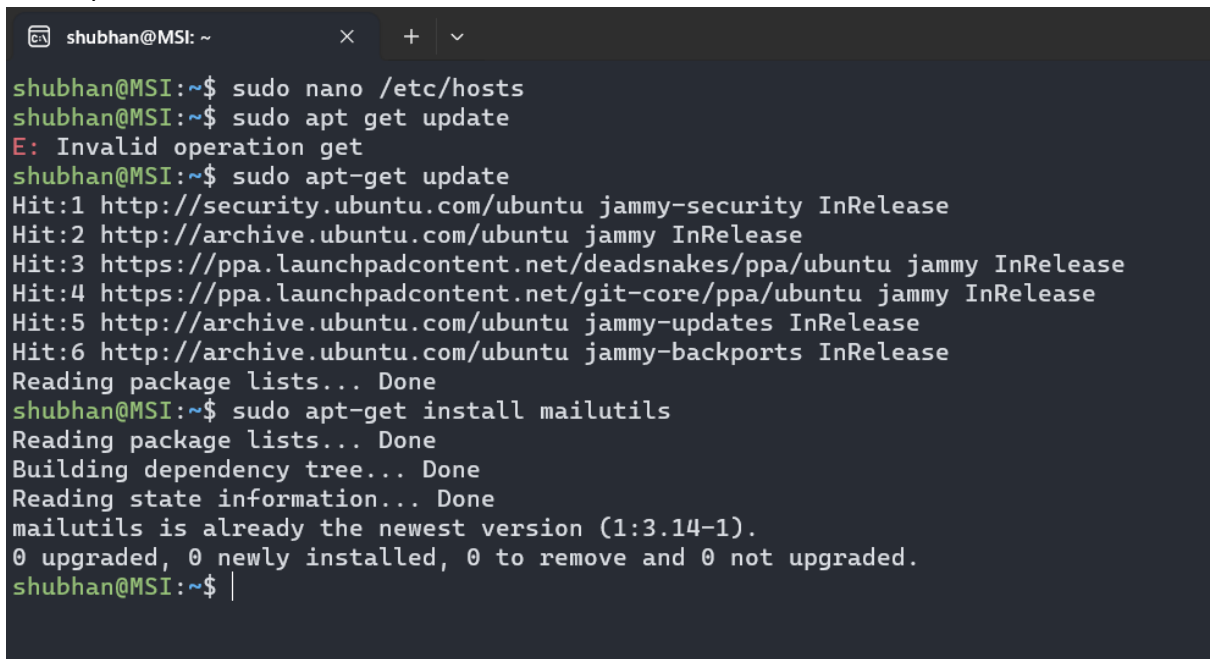
```
GNU nano 6.2 /etc/hostname  
spit.ac.in  
[ Wrote 1 line ]  
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute  
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify  
^C Location  ^-_ Undo      ^-A Set Mark  
^/_ Go To Line ^-E Redo      ^-G Copy
```

3. Run `sudo nano /etc/hosts` Command And Enter Domain Next To 127.0.1.1 And Save The File.

A screenshot of a terminal window titled 'shubhan@MSI: ~'. The terminal shows the GNU nano 6.2 editor editing the /etc/hosts file. The file content includes a comment about WSL, network settings, and IPv6 addresses. The bottom status bar shows various keyboard shortcuts like ^G Help, ^O Write Out, etc.

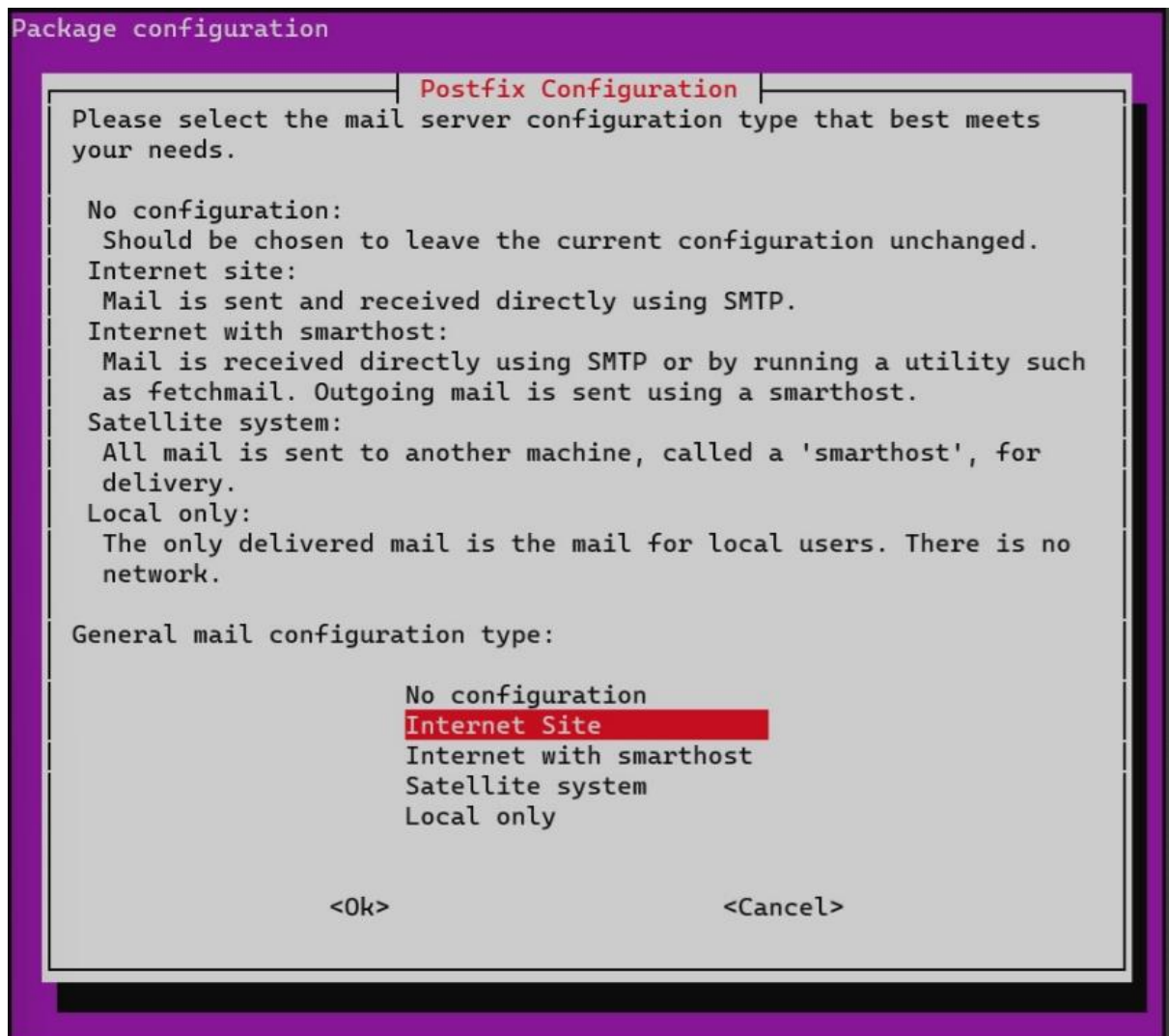
```
shubhan@MSI: ~  
GNU nano 6.2 /etc/hosts  
# This file was automatically generated by WSL. To stop automatic generation of this file, add the following entry to /etc/wsl.conf  
# [network]  
# generateHosts = false  
127.0.0.1 localhost  
127.0.1.1 spit.ac.in  
  
# The following lines are desirable for IPv6 capable hosts  
::1 ip6-localhost ip6-loopback  
fe00::0 ip6-localnet  
ff00::0 ip6-mcastprefix  
ff02::1 ip6-allnodes  
ff02::2 ip6-allrouters  
  
[ Read 12 lines ]  
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo      M-A Set Mark  
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^_ Go To Line  M-E Redo      M-G Copy
```

4. Run `sudo apt-get update` to install all updates, `sudo apt-get mailutils` , and `sudo apt install postfix`.

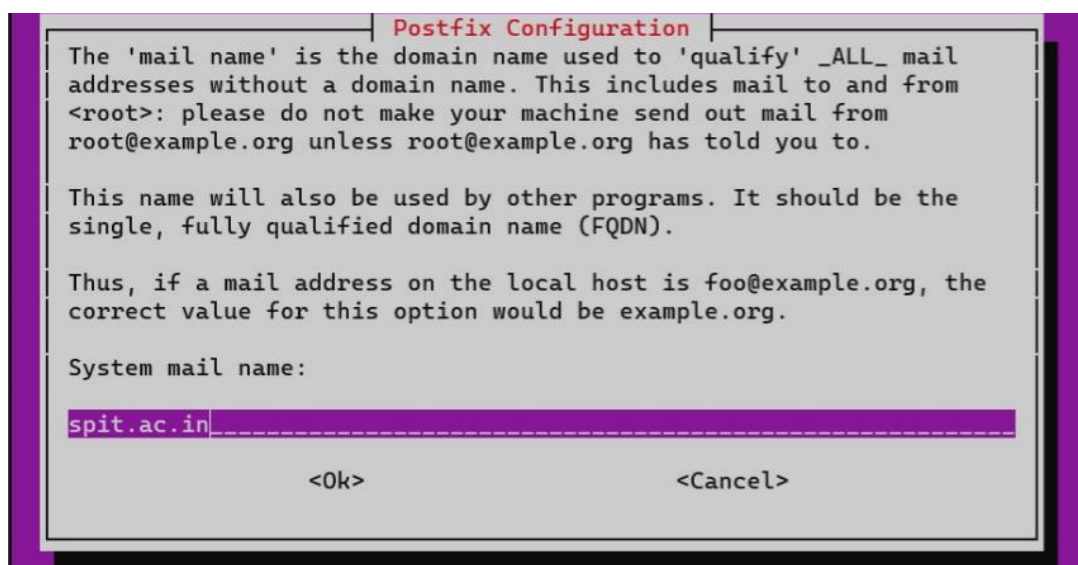
A screenshot of a terminal window titled 'shubhan@MSI: ~'. It shows the execution of several apt-get commands. The first command 'sudo apt get update' results in an error. The second command 'sudo apt-get update' successfully updates the package lists. The third command 'sudo apt-get install mailutils' shows that mailutils is already installed.

```
shubhan@MSI:~$ sudo nano /etc/hosts  
shubhan@MSI:~$ sudo apt get update  
E: Invalid operation get  
shubhan@MSI:~$ sudo apt-get update  
Hit:1 http://security.ubuntu.com/ubuntu jammy-security InRelease  
Hit:2 http://archive.ubuntu.com/ubuntu jammy InRelease  
Hit:3 https://ppa.launchpadcontent.net/deadsnakes/ppa/ubuntu jammy InRelease  
Hit:4 https://ppa.launchpadcontent.net/git-core/ppa/ubuntu jammy InRelease  
Hit:5 http://archive.ubuntu.com/ubuntu jammy-updates InRelease  
Hit:6 http://archive.ubuntu.com/ubuntu jammy-backports InRelease  
Reading package lists... Done  
shubhan@MSI:~$ sudo apt-get install mailutils  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
mailutils is already the newest version (1:3.14-1).  
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.  
shubhan@MSI:~$ |
```

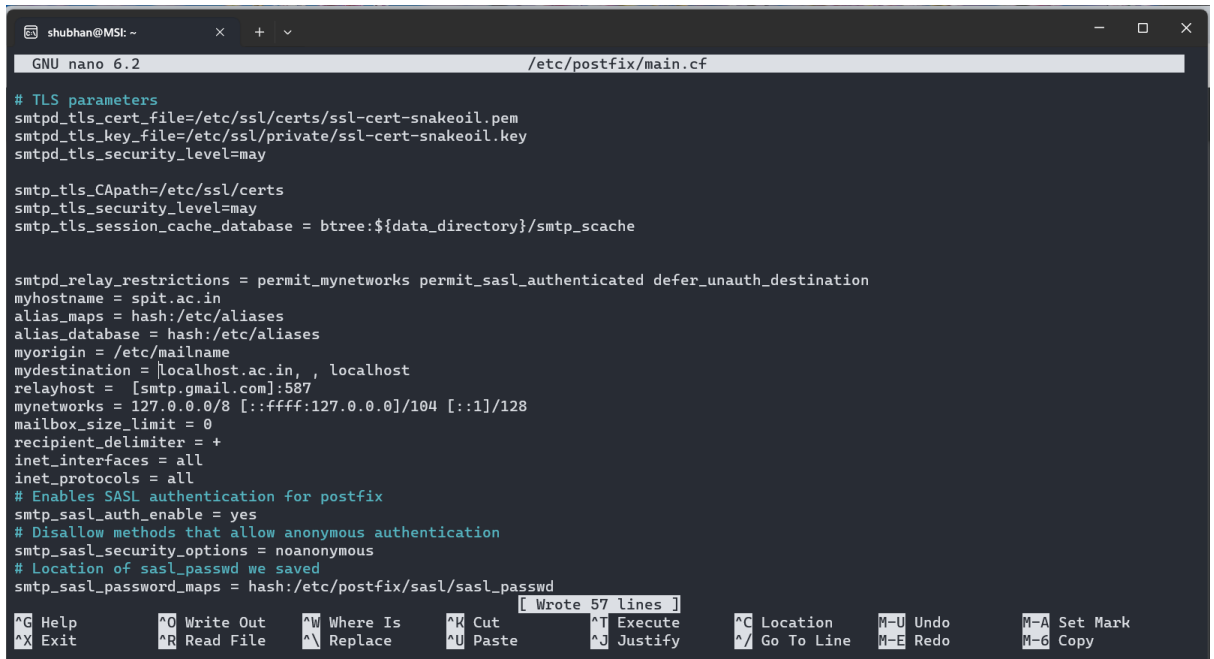
5. During installation And Configuration Of Postfix Select Internet Site Because We Need SMTP.



6. Check If Domain Name Is Correct And Press Ok.



7. Write the required lines into the main.cf file in the /etc/postfix/ folder



```
GNU nano 6.2 /etc/postfix/main.cf

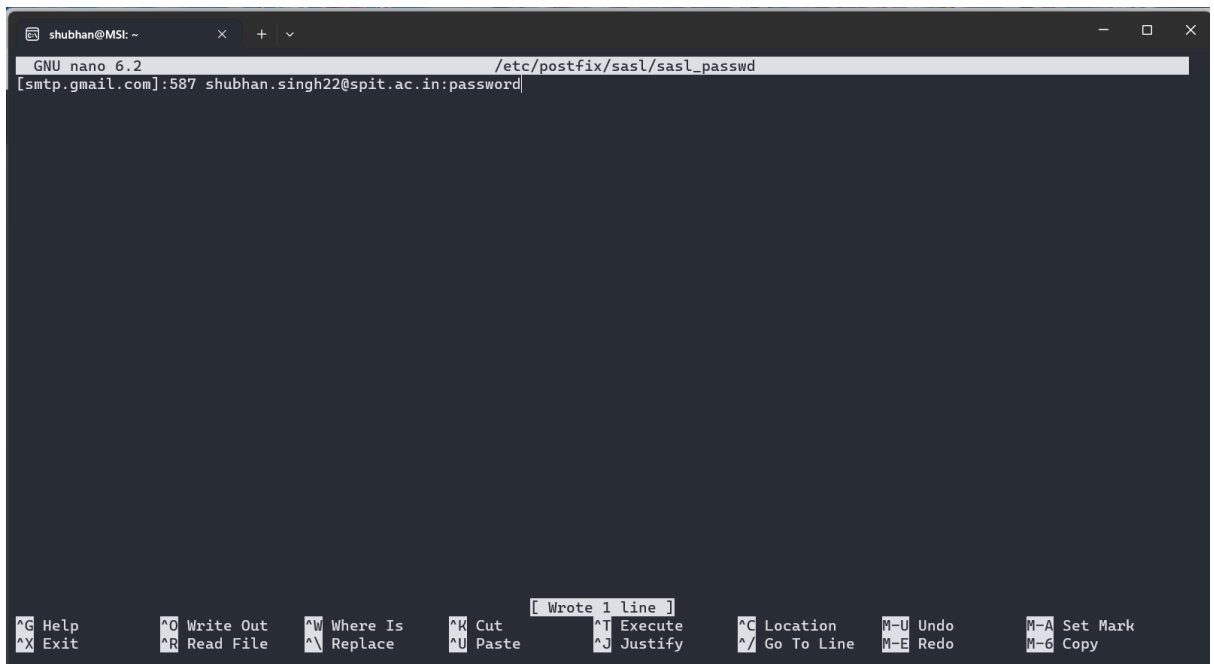
# TLS parameters
smtpd_tls_cert_file=/etc/ssl/certs/ssl-cert-snakeoil.pem
smtpd_tls_key_file=/etc/ssl/private/ssl-cert-snakeoil.key
smtpd_tls_security_level=may

smtpd_tls_CApath=/etc/ssl/certs
smtpd_tls_security_level=may
smtpd_tls_session_cache_database = btree:${data_directory}/smtp_scache

smtpd_relay_restrictions = permit_mynetworks permit_sasl_authenticated defer_unauth_destination
myhostname = spit.ac.in
alias_maps = hash:/etc/aliases
alias_database = hash:/etc/aliases
myorigin = /etc/mailname
mydestination = localhost.ac.in, localhost
relayhost = [smtp.gmail.com]:587
mynetworks = 127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128
mailbox_size_limit = 0
recipient_delimiter = +
inet_interfaces = all
inet_protocols = all
# Enables SASL authentication for postfix
smtp_sasl_auth_enable = yes
# Disallow methods that allow anonymous authentication
smtp_sasl_security_options = noanonymous
# Location of sasl_passwd we saved
smtp_sasl_password_maps = hash:/etc/postfix/sasl/sasl_passwd

[ Wrote 57 lines ]
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo     M-A Set Mark
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^_ Go To Line M-E Redo     M-6 Copy
```

8. Write the following into the sasl_passwd file:



```
GNU nano 6.2 /etc/postfix/sasl/sasl_passwd
[smtp.gmail.com]:587 shubhan.singh22@spit.ac.in:password

[ Wrote 1 line ]
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo     M-A Set Mark
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^_ Go To Line M-E Redo     M-6 Copy
```

(Here app password generated by google was used instead of password, the ability to allow less secure apps was removed from gmail in 2022, so we have to use app passwords generated by google to allow specific apps to access our account.)

9. Convert The sasl_passwd File Into A Database File Using sudo postmap /etc/postfix/sasl/sasl_passwd Command

```
shubhan@MSI: ~  
shubhan@MSI:~$ sudo postmap /etc/postfix/sasl/sasl_passwd  
postmap: warning: /etc/postfix/main.cf, line 55: overriding earlier entry: smtp_tls_security_level=may  
shubhan@MSI:~$
```

10. After reloading postfix, run the following command to send a mail:

echo "<Message>" | mail -s "<title>" <email-address> command

