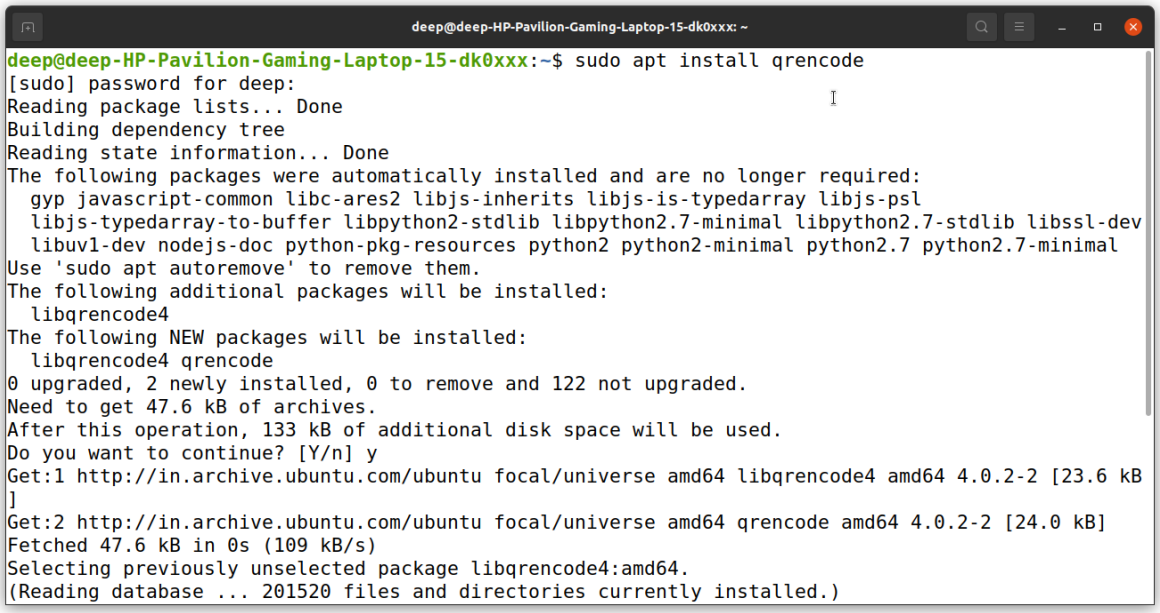
Experiment 7: Creating and Reading QR codes

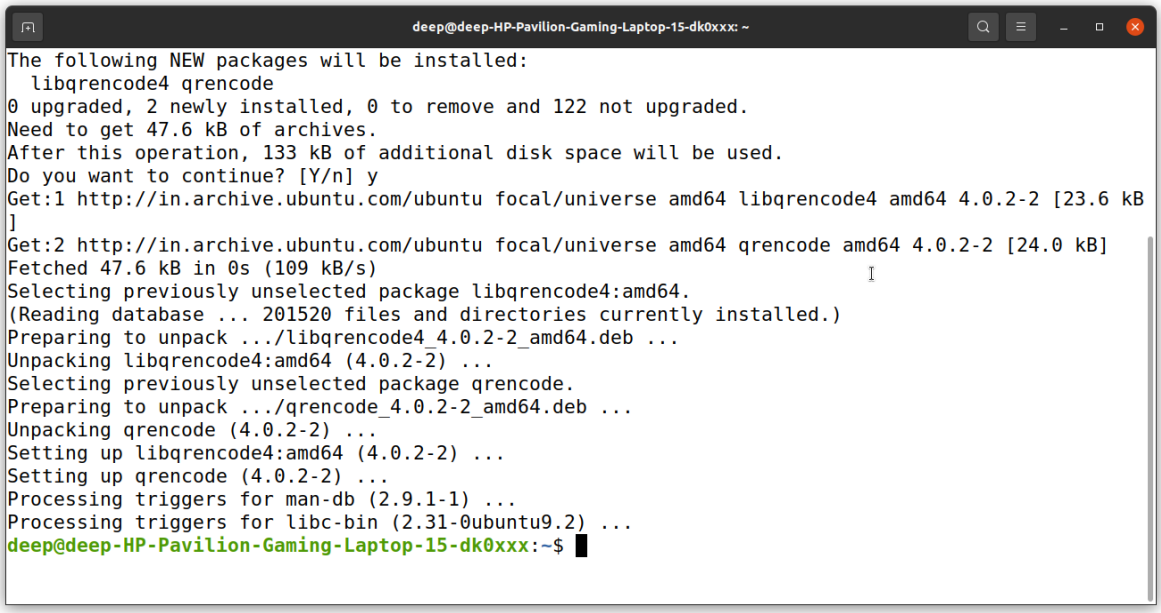
Name: Deep Nayak **UID**: 2019130045 TE COMPS

AIM : To create and read QR Codes for the given exercise

PROCEDURE:

Installing qrencode





1. The quickest way to create a QR code is with the Qrencode command-line utility. Any major distribution can install Qrencode via the package manager. The following command then creates a QR code containing the text “Hello World!”: $ qrencode -o qrcode.png 'Hello World!'

2. $ qrencode -t EPS -o qrcode.eps 'Hello World!'

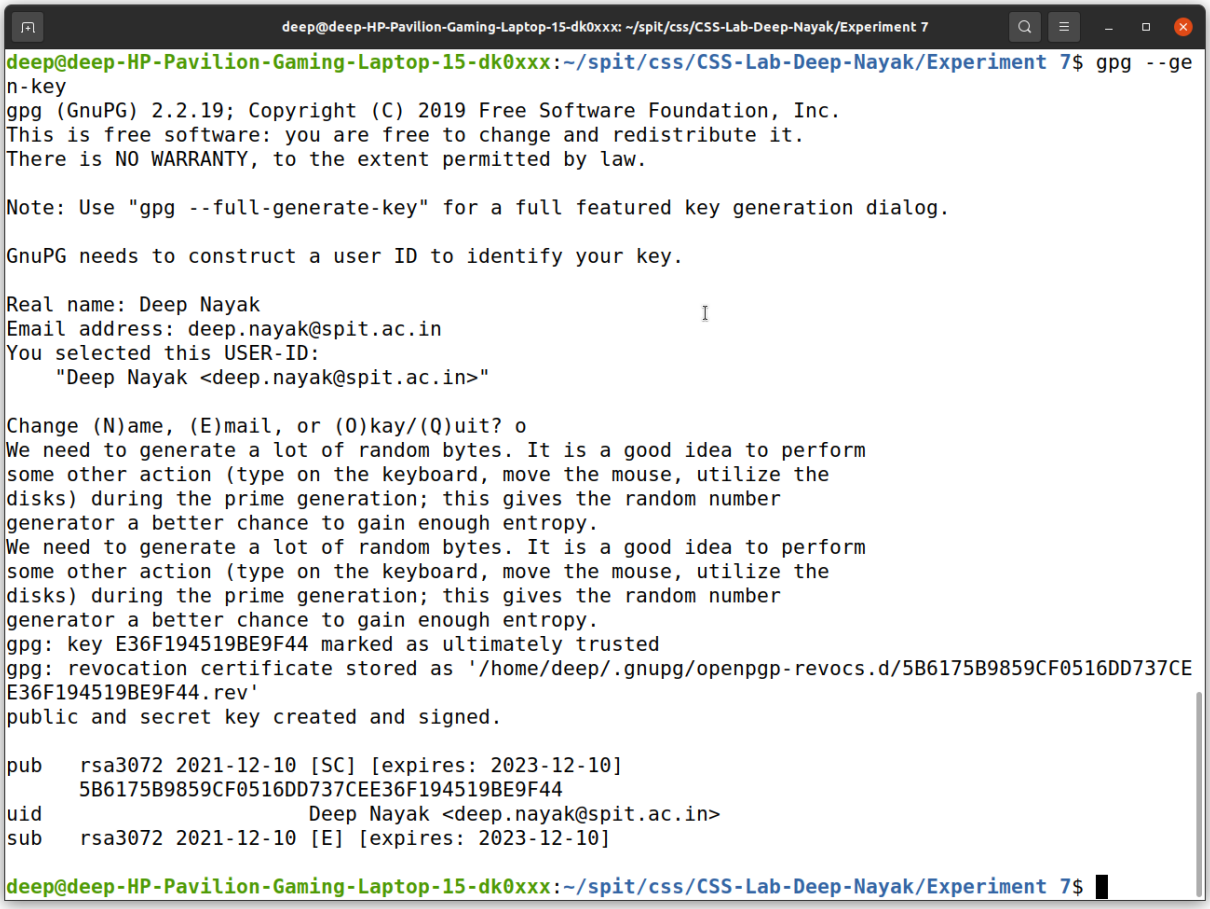
3. $ qrencode -t ASCII -o qrcode.txt 'Hello World!'

4. $ qrencode -m 10 -o qrcode.png 'Hello World!'

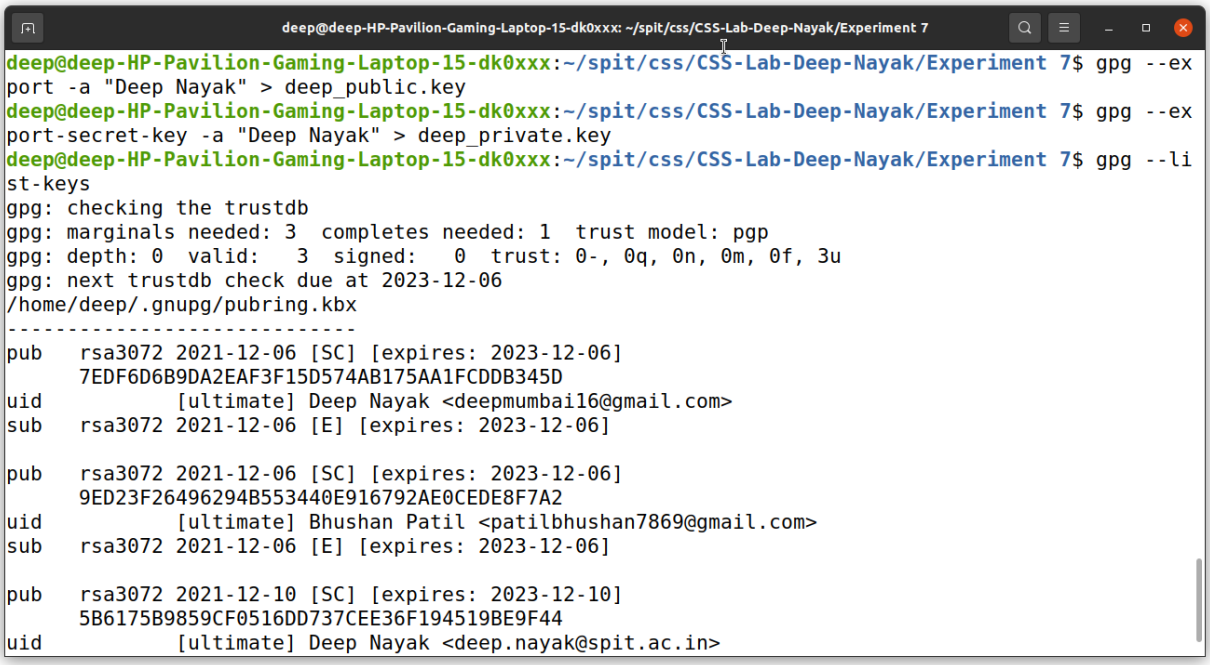
5. $ qrencode -s 2 -m 10 -o qrcode.png 'Hello World!'

2. Checking tolerance

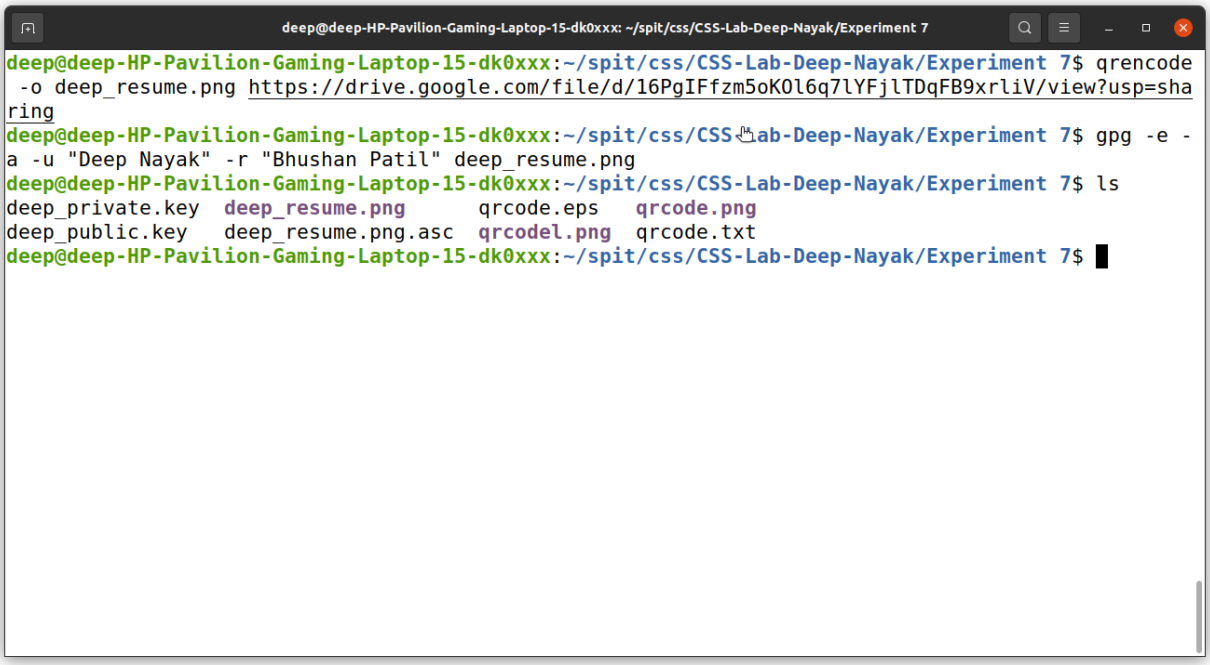
Creating new keys for encryption



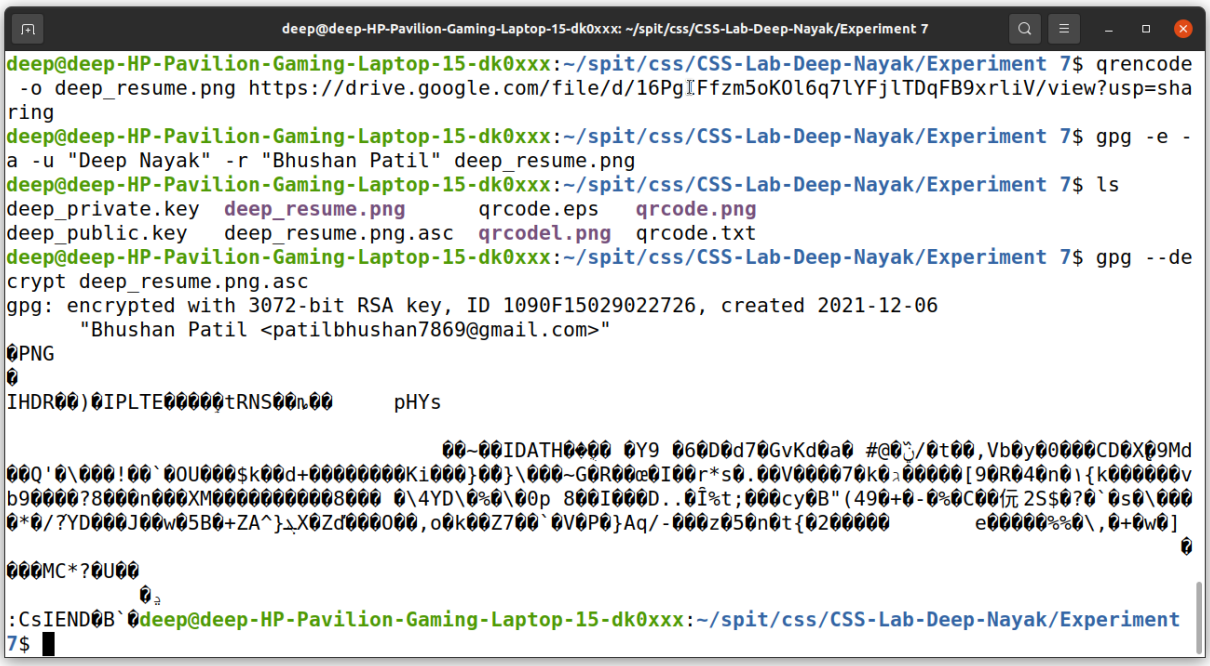
Exporting newly generated keys to public and private keys

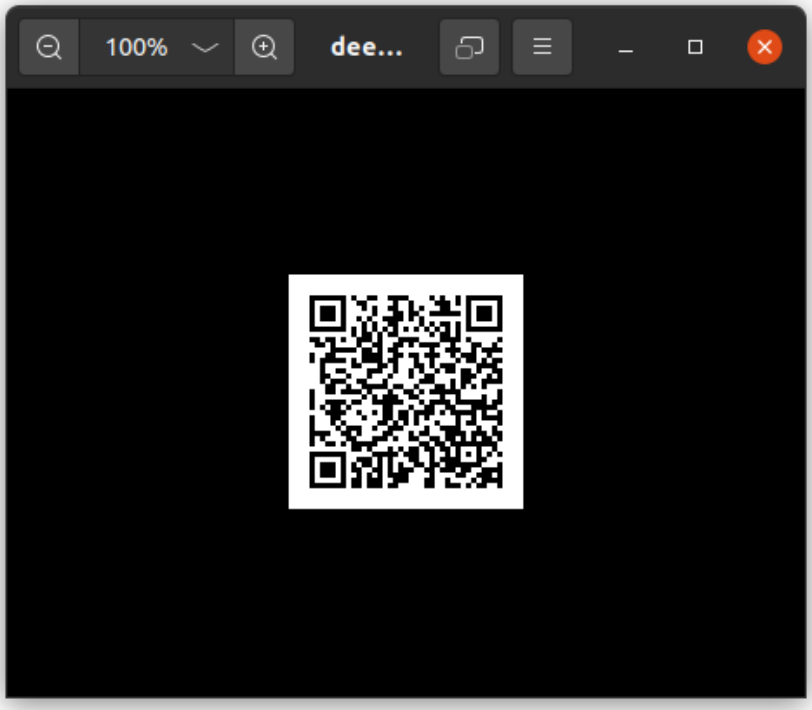


Encoding the URL of the Resume using qrencode

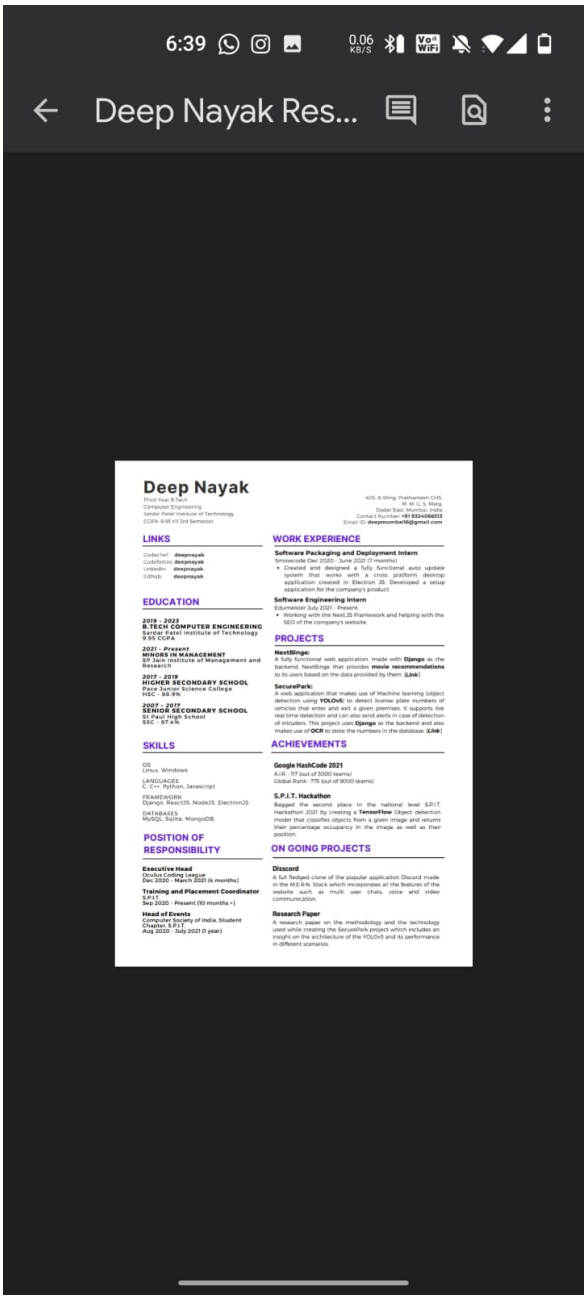


Once encrypted using the keys of Deep Nayak, user Bhushan Patil is able to decrypt the same using his own keys.
This makes sure that only the intended users are able to access the resume from the QR Code.

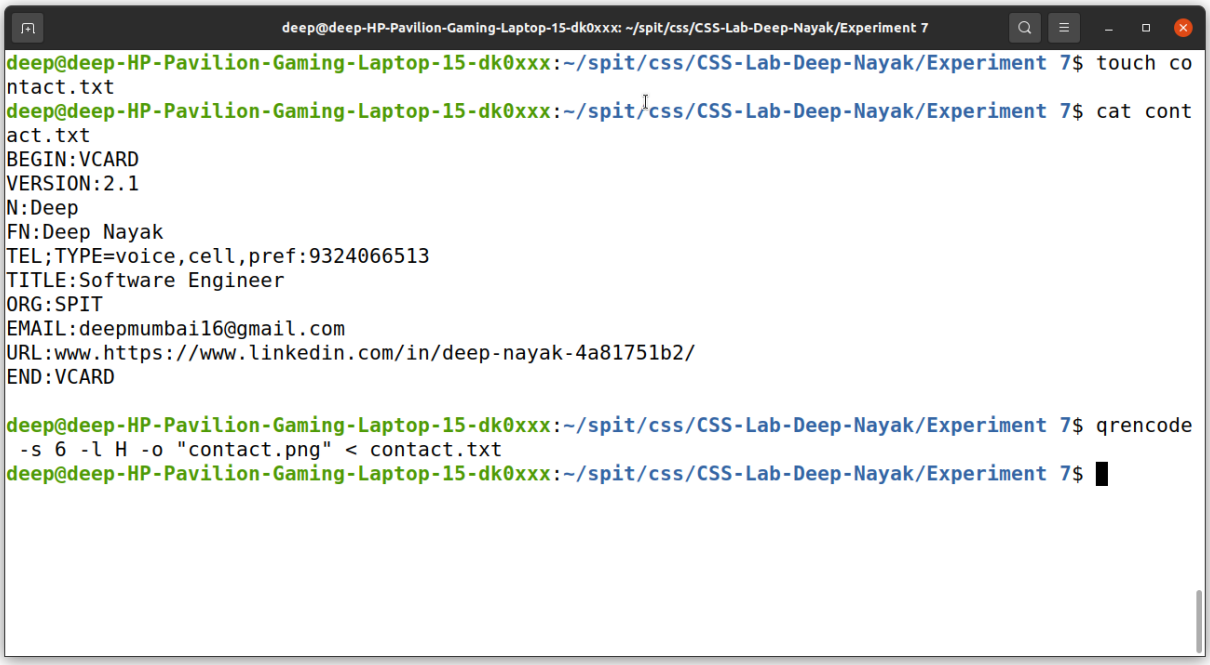




Checking the output of scanning the QR code on an external device (Mobile Phone)

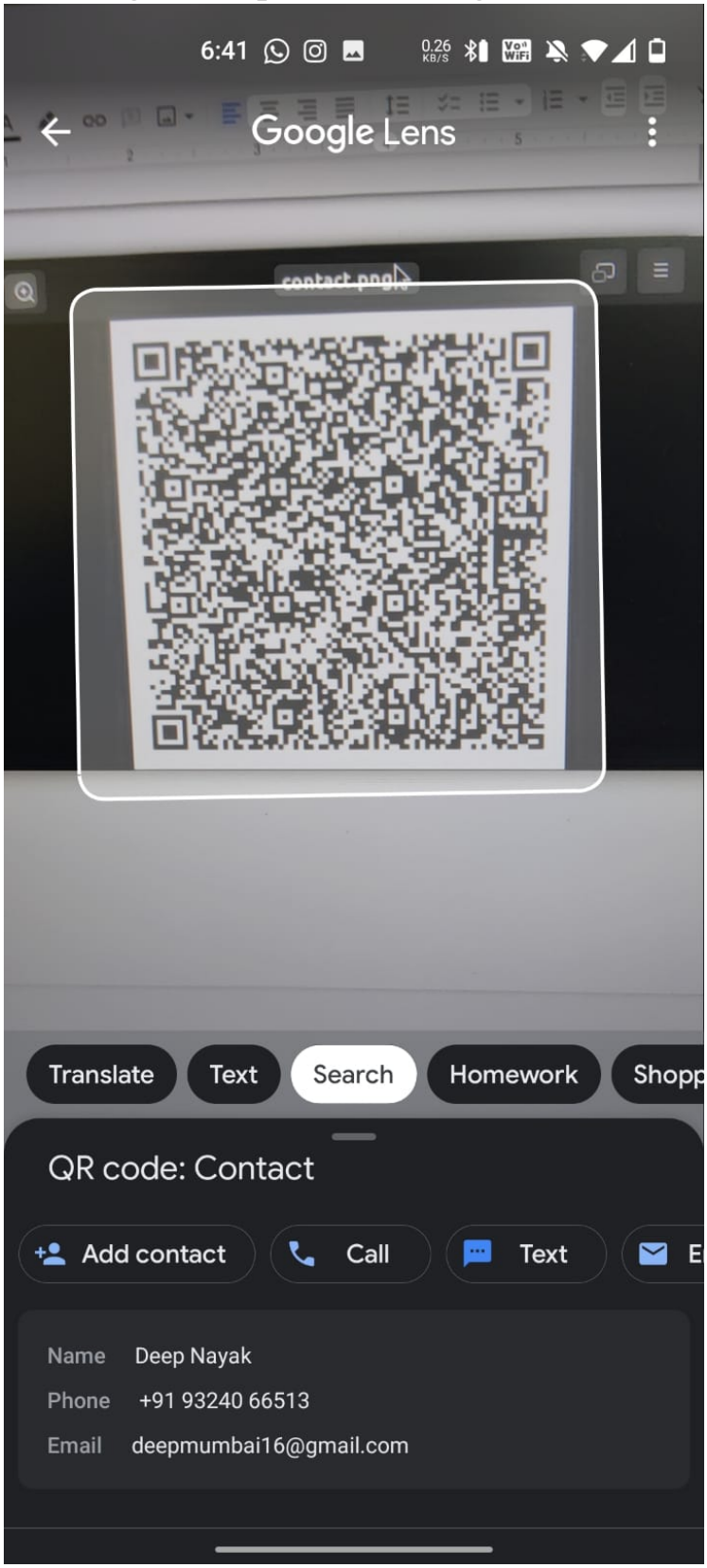


Creating a custom contact card and encapsulating the information in a QR Code



QR Code for Contact Card

Checking the output of scanning the contact QR code on a mobile device.



Conclusion:

1. Through this experiment I learnt about the usage and working of qrencode. QR codes are frequently used to track information about products in a supply chain and – because many smartphones have built-in QR readers – they are often used in marketing and advertising campaigns.
2. I learnt how to customize the QR Code by tweaking the tolerance value and depending on the use case, which tolerance value is preferable.
3. I also learnt how to share the link to my resume using the QR Code and encrypt the information so that only authorized users can access the resume.
4. Lastly, I learnt how to encapsulate different types of information such as text, URLs, contact cards, email addresses, SMS, etc in a QR Code and output the same in the form of an image, document and ASCII text.

Github Link:

https://github.com/deepnayak/CSS-Lab-Deep-Nayak/tree/master/Experiment%207