11.

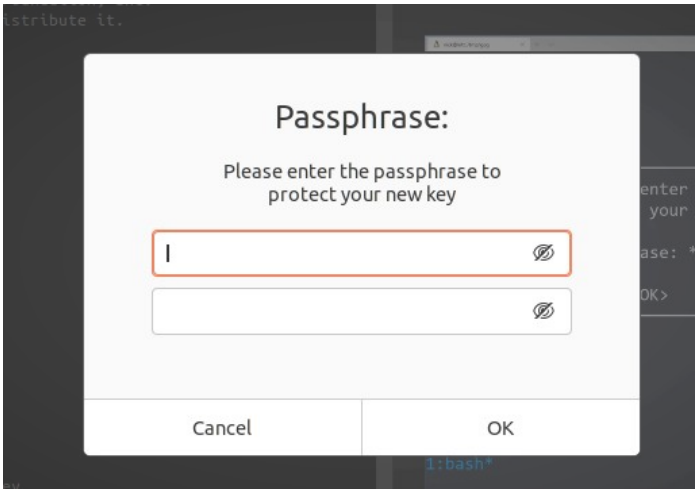
Create **GPG** key pair.

```
# gpg --full-generate-key
```

- Enter the key-size you want (I have entered 4096 for a strong key)
- Specify the validity period for the key.
- Enter identity field information as below.

```
bbr@EME17-G7064PKR:~/Documents/WSO2/2_Information_Security_Concepts/Answers/11$ gpg --full-generate-key
gpg (GnuPG) 2.2.19; Copyright (C) 2019 Free Software Foundation, Inc.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Please select what kind of key you want:
   (1) RSA and RSA (default)
   (2) DSA and Elgamal
   (3) DSA (sign only)
   (4) RSA (sign only)
  (14) Existing key from card
Your selection? 1
RSA keys may be between 1024 and 4096 bits long.
What keysize do you want? (3072) 4096
Requested keysize is 4096 bits
Please specify how long the key should be valid.
         0 = key does not expire
      <n>  = key expires in n days
      <n>w = key expires in n weeks
      <n>m = key expires in n months
      <n>y = key expires in n years
Key is valid for? (0) 1y
Key expires at Thu 04 Aug 2022 11:16:25 PM +0530
Is this correct? (y/N) y

GnuPG needs to construct a user ID to identify your key.

Real name: Budditha Rathnayake
Email address: budditha.br@gmail.com
Comment:
You selected this USER-ID:
    "Budditha Rathnayake <budditha.br@gmail.com>"
```

- Enter a passphrase to protect the key in prompted window.



- After some time, public key and secret key is created.
- It is mentioned the **expired date** and details of the key.

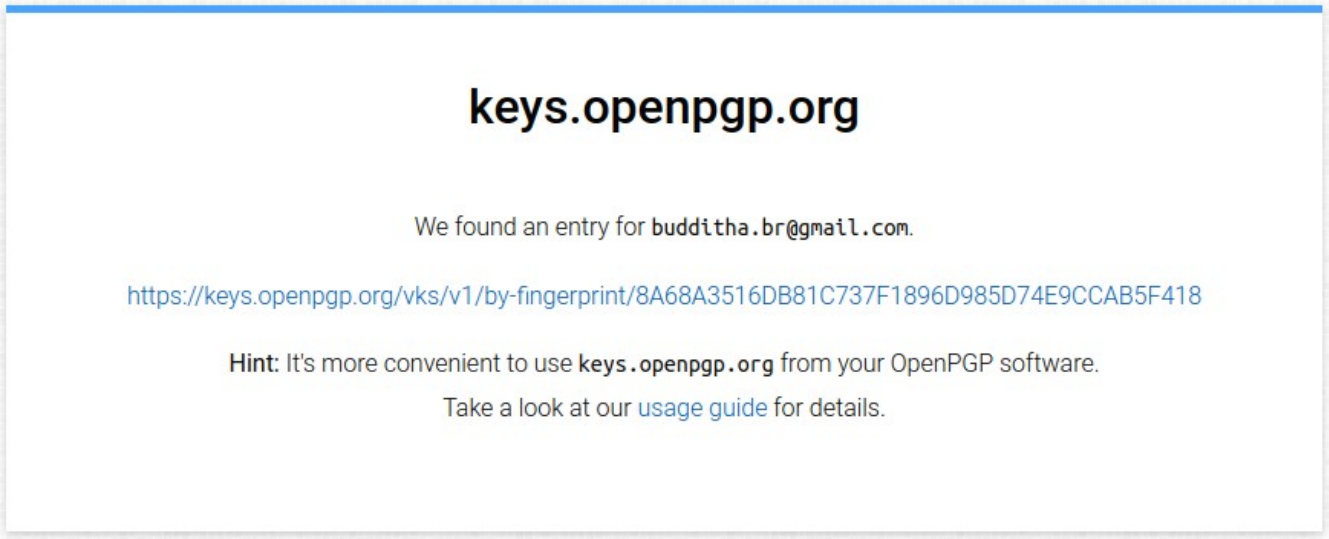
```
public and secret key created and signed.

pub   rsa4096 2021-08-04 [SC] [expires: 2022-08-04]
      8A68A3516DB81C737F1896D985D74E9CCAB5F418
uid                      Budditha Rathnayake <budditha.br@gmail.com>
sub   rsa4096 2021-08-04 [E] [expires: 2022-08-04]
```

Export the created public key in order to upload to keys.openpgp.org

```
# gpg --export --armor --output budditha.gpg.pub budditha.br@gmail.com
```

Then upload it to the keys.openpgp.org and verify the email sent to your email address.

That's it . public key is uploaded to public key-server.



URL to the key :
https://keys.openpgp.org/vks/v1/by-fingerprint/8A68A3516DB81C737F1896D985D74E9CCAB5F418