

# **BABU BANARASI DAS UNIVERSITY**



## **SCHOOL OF ENGINEERING**

Department of Computer Science C Engineering

### **PRIVACY AND SECURITY IN IOT LAB**

**(ITBC3751)**

Session 2025-26

### **PRACTICAL LAB FILE**

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## PRACTICAL 1

### OBJECTIVE

To hide text data inside an image file using command prompt(CMD) as a basic form of steganography.

### System Requirement:

Operating system: Windows (any version with command prompt)

### Tool Required:

- > Command Prompt(built-in)
- > A JPG or PNG image (blade.jpg)
- > A zip file which contain secret message

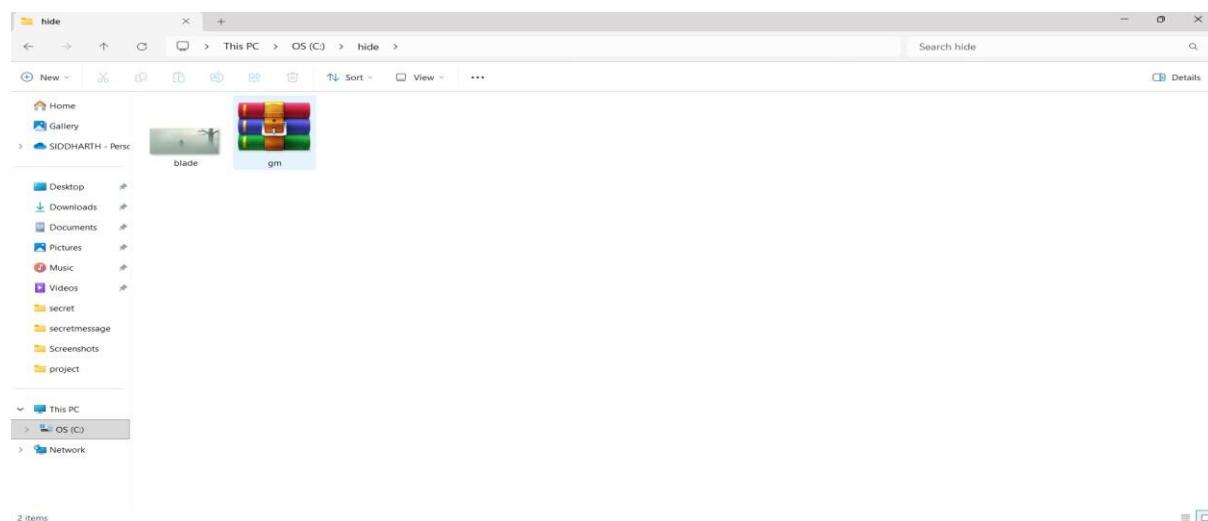
### STORAGE LOCATION:

- > A working directory(C:\hide)

### Procedure:

#### Step 1: Create and prepare the working folder

1. create a folder name hide in C drive
2. Place the image and zip file which contain text you want hide into this folder.



#### Step 2: Open command Prompt and navigate to the folder

1. Press Win +R ,type cmd and press Enter to open Command Prompt
2. Navigate to your working directory:
3. cd C:\hide

```
Command Prompt
Microsoft Windows [Version 10.0.26100.6725]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Shiva>cd C:\hide
C:\hide>
```

Step 3.Hide a secret message using copy command

Run the following command to append to the image file :

`Copy /b blade.jpg + gm.zip bgm.jpg`

What this does:

- `/b` → binary mode (needed for non-text files)
- `blade.jpg` → your image (carrier)
- `gm.zip` → the file you want to hide
- `bgm.jpg` → output image that looks normal but contains the ZIP

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 10.0.26100.6725]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Shiva> cd C:\hide
C:\hide>dir
Volume in drive C is OS
Volume Serial Number is 88CB-6E51
Directory of C:\hide
10/12/2025 10:22 AM <DIR>          212,611 blade.jpg
08/19/2025 10:12 AM           166 gm.zip
10/12/2025 10:08 AM          212,777 bytes
    2 File(s)   347,731,746,816 bytes free
C:\hide>copy /b blade.jpg + gm.zip bgm.jpg
blade.jpg
gm.zip
      1 file(s) copied.

C:\hide>
```

#### **Step 4. Verify the hidden message**

To check whether the message was added

**Open with notepad**

**Right click on the new image ,then click on opwn with notepad**

**Scroll down to the bottom to see the hidden message.**

```
File Edit View
File mālū, kād .A@Q
€ d
" 2 00 E d 2 0 02 &L<0W 0 00 ÉP 0 €€
"DRAC 0 dût" 0
"0 000E d
e, 00
€ d
€€; "0 00 0 H" 00
00 L€ 00
€€ 0 000 @ 0 00 0m0@ÉPÉ00" 0 !MQL&L,0Làm21 200P@0@r
& 000 1 0L 0A 0
€€d 000\000&T 0€-@ 0 d
€
"0€€
€€ 0 dñd 0€ 0 0" 0 0 (d€ 00E00 0 d€" 0€ 0€ 00Ad€(!@
€
0
000&L "000
"0 000&L" f 0 0. A00000"000"; €02 e20"0 g 00AC&00L " 0 6600 0L€", " 0 00P00 0" "0 0000 0@ 0 0002 2 d€" d€ d02d 0L 0L er "2 d€ 00 0 0 0( 0d 00P00" 0 S 000\00 0 e2 d€" " 0W 2d021" 2d 0002 d I 0 0
"0 000" 0 000 0 r 0 000 P 0 x00 00 0 0 0údyX0üEÜ#ÜPKÜÜ
ÜPL|x000 0 0 gm.txt good morning LUCKNOWPKÜÜ
ÜPL|x000 0 0 $ gm.txt
0 0 v0+01;0B01$01;0Là 01;ÜPKÜÜ 0 0 X 8

Ln 3761, Col 52 20 of 212,776 characters Plain text 100% Unix (LF) ANSI
Air Poor Next Wednesday
Search 10:32 AM 10/12/2025
```