RIPHAH INTERNATIONAL UNIVERSITY

lab#7

NAME: AHMED AZIZ
SAP ID: 55223
Course: OPERSTING SYSTEM

LAB EXERCISE:

GIT installation Command.

```
ahmedaziz55223@Ubantu:~$ sudo apt install git -y
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)
^Citing for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is held by process 4777 (aptd)... 12s
ahmedaziz55223@Ubantu:~$ sudo rm -f /var/lib/dpkg/lock-frontend
ahmedaziz55223@Ubantu:~$ sudo rm -f /var/lib/dpkg/lock
ahmedaziz55223@Ubantu:~$ sudo rm -f /var/cache/apt/archives/lock
ahmedaziz55223@Ubantu:~$ sudo apt install git -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
```

```
ahmedaziz55223@Ubantu:~$ which git
/usr/bin/git
ahmedaziz55223@Ubantu:~$ git --version
git version 2.34.1
ahmedaziz55223@Ubantu:~$
```

UPGRADE GIT:

```
root@Ubantu:/home/ahmedaziz55223# sudo apt update
Hit:1 http://pk.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://pk.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://pk.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu jammy-security InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
All packages are up to date.
root@Ubantu:/home/ahmedaziz55223# sudo apt upgrade git
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
git is already the newest version (1:2.34.1-1ubuntu1.15).
Calculating upgrade... Done
The following packages were automatically installed and are no longer required:
  linux-headers-6.8.0-78-generic linux-hwe-6.8-headers-6.8.0-78 linux-hwe-6.8-tools-6.8.0-78 linux-image-6.8.0-78-generic
  linux-modules-6.8.0-78-generic linux-modules-extra-6.8.0-78-generic linux-tools-6.8.0-78-generic
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@Ubantu:/home/ahmedaziz55223#
```

EXERCISE:

```
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$ nano task2.java
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$ javac task2.java
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$ java task2.java
error: class found on application class path: task2
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$ java task2
ENter the first Number: 45
Enter the Second Number: 21

Largest = 45
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$ cat task2.java
import java.util.Scanner;

public class task2
{
public static  void main(String[] args)
{
int numberOne,numberTwo,largest;
Scanner scan = new Scanner(System.in);

System.out.print("ENter the first Number: ");
numberOne = scan.nextInt();
System.out.print("Enter the Second Number: ");
numberTwo= scan.nextInt();
if(numberOne>numberTwo)
largest=numberOne;
else
largest=numberTwo;
System.out.println("\nLargest = " +largest);
}
}
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$
```

C program having infinite loop:

```
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$ nano infinite.c
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$ gcc infinite.c -o infinite
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$ ./infinite
process id: 14836
RUNNING...=0
  RUNNING...=1
  RUNNING...=2
  RUNNING...=3
  RUNNING...=4
  RUNNING...=5
  RUNNING...=6
  RUNNING...=7
^C
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$
```

Killing command:

```
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$ ps -u $USER
   PID TTY          TIME CMD
  2261 ?        00:00:02 systemd
  2262 ?        00:00:00 (sd-pam)
  2268 ?        00:00:00 pipewire
  2269 ?        00:00:00 pipewire-media-
  2270 ?        00:00:01 pulseaudio
  2271 ?        00:00:02 snapd-desktop-i
  2278 ?        00:00:00 gnome-keyring-d
  2291 tty2     00:00:00 gdm-wayland-ses
  2292 ?        00:00:03 dbus-daemon
  2296 tty2     00:00:00 gnome-session-b
  2332 ?        00:00:00 xdg-document-po
  2335 ?        00:00:00 xdg-permission-
  2365 ?        00:00:00 gnome-session-c
  2377 ?        00:00:00 gvfsd
```

```
  4168 pts/0    00:00:00 bash
  4727 ?        00:00:55 update-manager
 14845 pts/0    00:00:00 infinite
 14846 pts/2    00:00:00 bash
 14853 pts/2    00:00:00 ps
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$ kill -9 14845
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$
```

```
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$ ./infinite
process id: 14845
  Files G...=0
RUNNING...=1
 RUNNING...=2
 RUNNING...=3
 RUNNING...=4
 RUNNING...=5
 RUNNING...=6
 RUNNING...=7
 RUNNING...=8
 RUNNING...=9
 RUNNING...=10
 RUNNING...=11
 RUNNING...=12
 RUNNING...=13
 RUNNING...=14
 RUNNING...=15
 RUNNING...=16
 RUNNING...=17
 RUNNING...=18
 RUNNING...=19
 RUNNING...=20
 RUNNING...=21
 RUNNING...=22
 RUNNING...=23
 RUNNING...=24
 RUNNING...=25
 RUNNING...=26
 RUNNING...=27
 RUNNING...=28
 RUNNING...=29
 RUNNING...=30
Killed
ahmedaziz55223@Ubantu:~/RIPHAH/lab07$
```