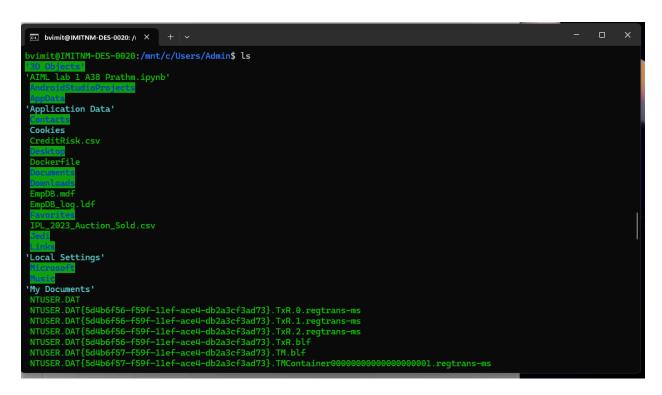
Ansible

Installation steps:

```
bvimit@IMITNM-DES-0020: / ×
Microsoft Windows [Version 10.0.26100.3775]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Admin>ansible --version
'ansible' is not recognized as an internal or external command,
operable program or batch file.
C:\Users\Admin>wsl -l -v
                                      VERSION
                     STATE
  docker-desktop
                     Stopped
                      Stopped
  Ubuntu
  Ubuntu-22.04
                     Stopped
C:\Users\Admin>wsl -d Ubuntu-22.04
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 5.15.167.4-microsoft-standard-WSL2 x86_64)
 * Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
 * Support:
                    https://ubuntu.com/pro
 System information as of Sat Apr 19 09:44:08 IST 2025
  System load: 0.0
Usage of /: 0.2% of 1006.85GB
                                      Processes:
                                                               73
                                      Users logged in:
                                      IPv4 address for eth0: 172.19.160.226
  Memory usage: 12%
  Swap usage:
This message is shown once a day. To disable it please create the
/home/bvimit/.hushlogin file.
```

```
bvimit@IMITNM-DES-0020: / × + ×
  ovimit@IMITNM-DES-0020:<mark>/mnt/c/Users/Admin$ sudo apt update && sudo apt upgrade -y</mark>
[sudo] password for bvimit:
Sorry, try again.
[sudo] password for bvimit:
Get:1 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Hit:2 http://archive.ubuntu.com/ubuntu jammy InRelease
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [2222 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:6 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [342 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [3145 kB]
Get:8 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [2499 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [558 kB] Get:10 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [972 kB] Get:11 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [209 kB]
Get:12 http://archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [409 kB]
Get:12 http://archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [409 kB]
Get:13 http://archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [3336 kB]
Get:14 http://archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [592 kB]
Get:15 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1200 kB]
Get:16 http://archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [296 kB]
Get:17 http://archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [30.0 kB]
Get:18 http://archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.5 kB]
Fetched 16.2 MB in 25s (642 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
17 packages can be upgraded. Run 'apt list --upgradable' to see them.
 Reading package lists... Done
 Building dependency tree... Done
Reading state information... Done
```

```
bvimit@IMITNM-DES-0020: /I × + v
Preparing to unpack .../12-binutils_2.38-4ubuntu2.8_amd64.deb ...
Unpacking binutils (2.38-4ubuntu2.8) over (2.38-4ubuntu2.7) ...
Preparing to unpack .../13-binutils-common_2.38-4ubuntu2.8_amd64.deb
Unpacking binutils-common:amd64 (2.38-4ubuntu2.8) over (2.38-4ubuntu2.7) ...
Setting up libexpat1:amd64 (2.4.7-1ubuntu0.6) ...
Setting up pci.ids (0.0~2022.01.22-1ubuntu0.1) ...
Setting up binutils-common:amd64 (2.38-4ubuntu2.8) ...
Setting up libctf-nobfd0:amd64 (2.38-4ubuntu2.8) ...
Setting up perl-modules-5.34 (5.34.0-3ubuntu1.4) ...
Setting up xxd (2:8.2.3995-1ubuntu2.24) ...
Setting up vim-common (2:8.2.3995-lubuntu2.24) ...
Setting up libbinutils:amd64 (2.38-4ubuntu2.8)
Setting up vim-runtime (2:8.2.3995-lubuntu2.24) ...
Setting up libctf0:amd64 (2.38-4ubuntu2.8) ...
Setting up libet+0:amdo4 (2.38-4ubuntu2.8) ...
Setting up liber+15.34:amdo4 (5.34.0-3ubuntu1.4) ...
Setting up vim (2:8.2.3995-1ubuntu2.24) ...
Setting up vim-tiny (2:8.2.3995-1ubuntu2.24) ...
Setting up perl (5.34.0-3ubuntu1.4) ...
Setting up binutils-x86-64-linux-gnu (2.38-4ubuntu2.8) ...
Setting up binutils (2.38-4ubuntu2.8) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for libc-bin (2.35-0ubuntu3.9) ...
Processing triggers for man-db (2.10.2-1) ...
                                     020:/mnt/c/Users/Admin$ sudo apt install ansible -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ansible is already the newest version (2.10.7+merged+base+2.10.8+dfsg-1). 0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded. bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$
```



```
Tuser.ini

'numpy multidimesiopn_A20.ipynb'
package-lock.json
package_lock.json
pandas_earth_quake_A20.ipynb

Tuser.ini

pemhttpd.exe
pemhttpd.exe
pemhttpd.exe-20241003134424
pemhttpd.exe-20241003141252
pemhttpd.exe-20241003141328

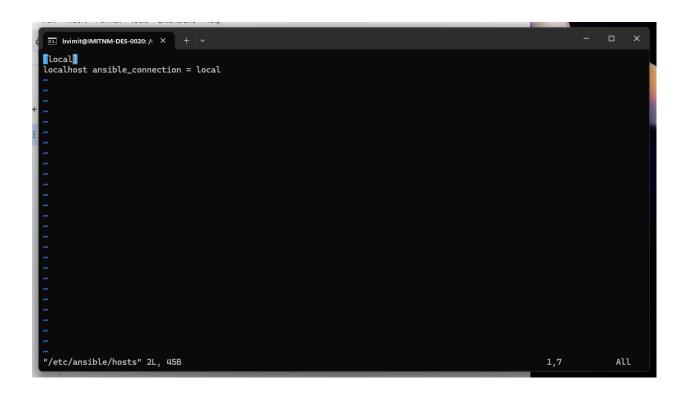
'plotting graphs.ipynb'
postgis_3_d_pgi6.exe
postgresql_12.exe
postgresql_12.exe
postgresql_13.exe
postgresql_14.exe
postgresql_14.exe
postgresql_14.exe
postgresql_14.exe
postgresql_14.exe
postgresql_16.exe
postgresql_17.exe

Tuser.ini

Description

Tuser.ini

Tu
```



```
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ sudo vi /etc/ansible/hosts
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ ansible local -m ping
localhost | SUCCESS => {
    "ansible_facts": {
     "discovered_interpreter_python": "/usr/bin/python3"
     },
     "changed": false,
     "ping": "pong"
}
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ sudo vi /etc/ansible/hosts
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$
```

Find user name

```
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ sudo vi /etc/ansible/hosts
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ ansible local -m shell -a "whoami"
localhost | CHANGED | rc=0 >>
bvimit
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ |
```

Listing files

```
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ ansible local -m shell -a "whoami"
localhost | CHANGED | rc=0 >>
bvimit
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ ansible local -m shell -a "ls -la /home/$USER"
localhost | CHANGED | rc=0 >>
total 48
drwxr-x--- 6 bvimit bvimit 4096 Apr 19 09:44 .
drwxr-xr-x 3 root root 4096 Apr 7 13:29 ..
drwxr-xr-x 3 bvimit bvimit 4096 Apr 7 13:34 .ansible
-rw----- 1 bvimit bvimit 1446 Apr 7 14:50 .bash_istory
-rw-r--r-- 1 bvimit bvimit 220 Apr 7 13:29 .bash_logout
-rw----- 1 bvimit bvimit 4096 Apr 7 13:29 .bash_c
drwx----- 2 bvimit bvimit 4096 Apr 7 13:30 .cache
drwxr-xr-x 2 bvimit bvimit 4096 Apr 19 09:44 .landscape
-rw-r---- 1 bvimit bvimit 807 Apr 7 13:29 .profile
-rw-r---- 1 bvimit bvimit 807 Apr 7 13:31 .sudo_as_admin_successful
-rw------ 1 bvimit bvimit 2315 Apr 7 14:43 .viminfo
drwxr-xr-x 2 bvimit bvimit 2315 Apr 7 14:43 .viminfo
drwxr-xr-x 2 bvimit bvimit 133 Apr 7 14:43 firstplaybook.yml
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ |
```

Create file n write in it

```
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ ansible local -m shell -a "echo 'Hello' > /tmp/hello.txt" localhost | CHANGED | rc=0 >> bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ |
```

Check file created or not

```
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ ansible local -m shell -a "ls -l /tmp"
localhost | CHANGED | rc=0 >>
total 24
drwx----- 2 bvimit bvimit 4096 Apr 19 10:29 ansible_ansible.legacy.command_payload_mr07slpn
-rw-r-r-- 1 bvimit bvimit 6 Apr 19 10:27 hello.txt
drwx----- 2 root root 4096 Apr 19 09:44 snap-private-tmp
drwx----- 3 root root 4096 Apr 19 09:44 systemd-private-023f08cbd2b1437aae7c630ea8423862-systemd-logind.service-jwA
jh5
drwx----- 3 root root 4096 Apr 19 09:44 systemd-private-023f08cbd2b1437aae7c630ea8423862-systemd-resolved.service-7
TSuus
drwx----- 3 root root 4096 Apr 19 09:44 systemd-private-023f08cbd2b1437aae7c630ea8423862-systemd-timesyncd.service-
IW5aiF
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$
```

List only the file

```
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ ansible local -m shell -a "ls -l /tmp | grep hello"
localhost | CHANGED | rc=0 >>
-rw-r--r-- 1 bvimit bvimit 6 Apr 19 10:27 hello.txt
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ |
```

Display system load time

```
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ ansible local -m command -a "uptime" localhost | CHANGED | rc=0 >> 10:34:06 up 54 min, 1 user, load average: 0.05, 0.04, 0.00 bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ |
```

Check os version

```
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ ansible local -m command -a "cat /etc/os-release"
localhost | CHANGED | rc=0 >>
PRETTY_NAME="Ubuntu 22.04.5 LTS"
NAME="Ubuntu"
VERSION_ID="22.04"
VERSION="22.04.5 LTS (Jammy Jellyfish)"
VERSION="22.04.5 LTS (Jammy Jellyfish)"
VERSION_CODENAME=jammy
ID=ubuntu
ID_LIKE=debian
HOME_URL="https://www.ubuntu.com/"
SUPPORT_URL="https://bugs.launchpad.net/ubuntu/"
PRIVACY_POLICY_URL="https://bugs.launchpad.net/ubuntu/"
PRIVACY_POLICY_URL="https://www.ubuntu.com/legal/terms-and-policies/privacy-policy"
UBUNTU_CODENAME=jammy
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$
```

```
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ ansible local -m apt -a "name=nginx state=present" -b --ask-become-pass
BECOME password:
localhost | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "cache_update_time": 1745036120,
    "cache_updated": false,
    "changed": false
}
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$
```

```
-DES-0020:/mnt/c/Users/Admin$ ansible local -m shell -a "dpkg -l | grep nginx"
localhost | CHANGED | rc=0 >>
ii libnginx-mod-http-geoip2 1.18.0-6ubuntu14.6
ii libnginx-mod-http-image-filter 1.18.0-6ubuntu14.6
                                                                                                                               GeoIP2 HTTP module for Nginx
                                                                                                                               HTTP image filter module for Ngi
    libnginx-mod-http-xslt-filter 1.18.0-6ubuntu14.6
                                                                                                                               XSLT Transformation module for N
    libnginx-mod-mail
libnginx-mod-stream
libnginx-mod-stream-geoip2
                                                 1.18.0-6ubuntu14.6
1.18.0-6ubuntu14.6
1.18.0-6ubuntu14.6
1.18.0-6ubuntu14.6
                                                                                                                               Mail module for Nginx
Stream module for Nginx
GeoIP2 Stream module for Nginx
small, powerful, scalable web/pr
oxy server
ii nginx-common
                                                 1.18.0-6ubuntu14.6
                                                                                                                               small, powerful, scalable web/pr
oxy server - common files
                                                  1.18.0-6ubuntu14.6
                                                                                                            amd64
                                                                                                                               nginx web/proxy server (standard
ovimit@IMITNM-DES-0020:/mnt/c/Users/Admin$
```

```
bimit@IRITNM-DES-8028:/mmt/c/Users/Admin$ ansible local -m apt -a "name=nginx state=absent" -b localhost (TANAGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
        ", "changed": true,
        "stderr_lines": [],
        "stderr_lines | [],
        "stderr_lines |
```

```
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$ ansible local -m user -a "name=testuser state=present" -b
localhost | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": true,
    "comment": "",
    "create_home": true,
    "group": 1001,
    "home": "/home/testuser",
    "name": "testuser",
    "shell": "/bin/sh",
    "state": "present",
    "system": false,
    "uid": 1001
}
bvimit@IMITNM-DES-0020:/mnt/c/Users/Admin$
```

Playbook Java

```
| Note |
```

```
Adding debian:vTrus_ECC_Root_CA.pem
Adding debian:vTrus_Root_CA.pem
Adding debian:vTrus_Root_C
```

```
bvimit@IMITNM-DES-0020:-/mansi36$ java --version
openjdk 21.0.6 2025-01-21
OpenJDK Runtime Environment (build 21.0.6+7-Ubuntu-124.04.1)
OpenJDK Gd-Bit Server VM (build 21.0.6+7-Ubuntu-124.04.1, mixed mode, sharing)
bvimit@IMITNM-DES-0020:-/mansi36$ sudo apt install openjdk-21-jre-headless
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
openjdk-21-jre-headless is already the newest version (21.0.6+7-1~24.04.1).
openjdk-22-jre-headless set to manually installed.
9 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
bvimit@IMITNM-DES-0020:-/mansi36$ javac --version
javac 21.0.6
bvimit@IMITNM-DES-0020:-/mansi36$
```

```
bvimit@IMITNM-DES-0020:-/mansi36$ java --version
openjdk 21.0.6 2025-01-21
OpenDDK Runtime Environment (build 21.0.6+7-Ubuntu-124.04.1)
OpenDDK 64-Bit Server VM (build 21.0.6+7-Ubuntu-124.04.1, mixed mode, sharing)
bvimit@IMITNM-DES-0020:-/mansi36$ sudo apt install openjdk-21-jre-headless
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Openjdk-21-jre-headless is already the newest version (21.0.6+7-1~24.04.1).
openjdk-21-jre-headless is already the newest version (21.0.6+7-1~24.04.1).
openjdk-21-jre-headless is already to remove and 0 not upgraded.
bvimit@IMITNM-DES-0020:-/mansi36$ javac --version
javac 21.0.6
bvimit@IMITNM-DES-0020:-/mansi36$ vi HelloWorld.java
bvimit@IMITNM-DES-0020:-/mansi36$ cat HelloWorld.java
class HelloWorld{
    public static void main (String[] args)
    {
        System.out.println("Hello World!!");
    }
}
bvimit@IMITNM-DES-0020:-/mansi36$
```

```
System.out.println("Hello World!!");
}

system.out.println("Hello World!!");
}

system.out.println("Hello World!!");
}

system.out.println("Hello World!!");

in the system of the syste
```

Javaplaybook.yml

- name: Run Java Program Using Ansible

hosts: localhost

gather_facts: no tasks:

 name: Compile Java Program command: javac HelloWorld.java

args:

chdir: /home/bvimit/mansi36 register: compile_output

- name: Run Java Program

command: java -cp . HelloWorld

args:

chdir: /home/bvimit/mansi36

register: run output

- name: Display Java Program Output

debug:

msg: "{{ run_output.stdout}}"

```
| State | Stat
```