

JAVA INSTALLATION ON UBUNTU

JAVA:

Java is a programming language and computing platform first released by Sun Microsystems in 1995.

It has evolved from humble beginnings to power a large share of today's digital world, by providing the reliable platform upon which many services and applications are built.

There are many applications and even some websites that will not function unless you have Java installed.

The Java Virtual Machine is only one part of Java software that is involved in running an application.

The Java Virtual Machine is built right into your Java software download, part of the JRE and helps run Java applications.

COMMANDS

```
sudo -i
```

```
apt-get update -y
```

```
apt-get install default-jre -y
```

```
apt-get install default-jdk -y
```

```
java -version
```

```
ls /usr/lib/jvm/
```

```
apt install vim -y
```

```
vim /etc/profile.d/jdk11.sh
```

```
export JAVA_HOME="/usr/lib/jvm/jdk-11.0.10"
export PATH="$PATH:${JAVA_HOME}/bin"
```

```
echo $JAVA_HOME
```

if above command not works reboot or restart the server once

```
echo $PATH
```

RUN A BASIC JAVA PROGRAM

```
vim demo.java
```

```
class demo
{
    public static void main(String args[])
    {
        System.out.println("MY NAME IS RAHAM SHAIK");
    }
}
```

javac demo.java:	To Compile the Program
java demo	: To Execute the Program

PYTHON INSTALLATION ON UBUNTU

PYTHON:

Python is a high level, dynamic and general-purpose programming language.

It was designed and developed by Python Software Foundation.

COMMANDS

```
sudo apt-get update -y
```

```
sudo apt-get install python3 -y
```

```
sudo apt-get install python3.8 -y
```

python3 : This will take you to space where you can write your code

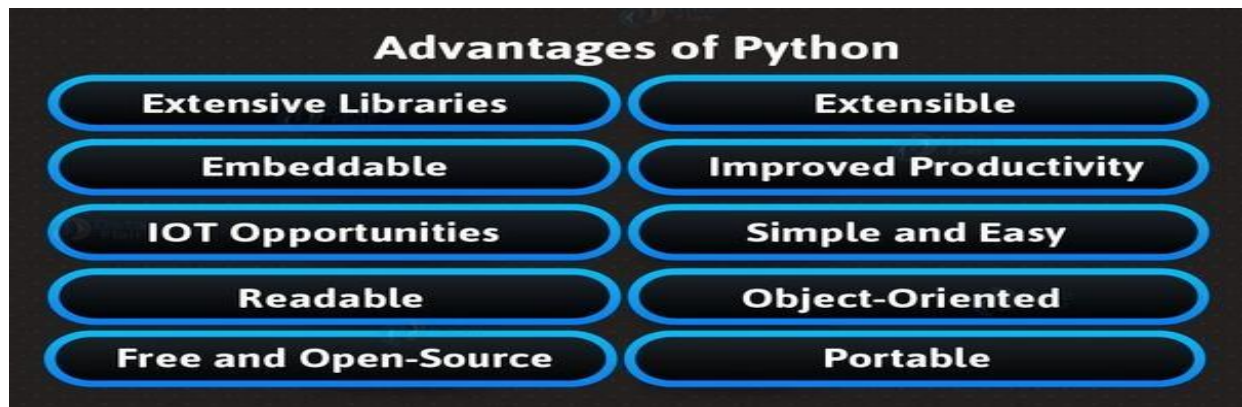
Now we are going to write a sample code to print hello world

To exit from that workspace give exit()

RUN A BASIC PYTHON PROGRAM

```
root@ip-172-31-3-196:~# python3
Python 3.8.10 (default, Mar 15 2022, 12:22:08)
[GCC 9.4.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> print('MY NAME IS RAHAM SHAIK')
MY NAME IS RAHAM SHAIK
>>> exit()
root@ip-172-31-3-196:~#
```

ADVANTAGES



NODEJS INSTALLATION ON UBUNTU

NODEJS:

Node.js is a server-side platform built on Google Chrome's JavaScript Engine (V8 Engine). Node.js was developed by Ryan Dahl in 2009 and its latest version is v0.10.36.

COMMANDS

`apt install nodejs -y`

`node -v`

To run the nodejs use the command : `nodejs`

To exit the from it use `.exit`

RUN A BASIC PYTHON PROGRAM

```
root@ip-172-31-3-196:~# nodejs
> console.log("MY NAME IS RAHAM SHAIK")
MY NAME IS RAHAM SHAIK
undefined
> .exit
root@ip-172-31-3-196:~#
```

ADVANTAGES

- JavaScript Everywhere
- Async Programming
- Database Support (SQL, NoSQL)
- Concurrent Connections
- npm
- Easily Test your Code

ARANGO INSTALLATION ON UBUNTU

ArangoDB is a native multi-model, open-source database with flexible data models for documents, graphs, and key-values. Build high performance applications using a convenient SQL-like query language or JavaScript extensions

COMMANDS

```
cd /etc/yum.repos.d/ echo 'deb https://download.arangodb.com/arangodb34/DEBIAN/ /' |
sudo tee /etc/apt/sources.list.d/arangodb.list
wget -q https://download.arangodb.com/arangodb34/DEBIAN/Release.key -O- | sudo
apt-key add -
sudo apt update -y
sudo apt -y install apt-transport-https
sudo apt -y install arangodb3
sudo systemctl start arangodb3
```

```
sudo systemctl status arangodb3
```

```
sudo arangosh
```

```
root@ip-172-31-3-196:~# arangosh
Please specify a password:

arangosh
arangosh (ArangoDB 3.4.11 [linux] 64bit, using jemalloc, build tags/v3.4.11-0-gf077c18143, VPack 0.1.33, RocksDB 5.16.0, ICU 58.1, V8 5.7.492.77, OpenSSL 1.1.0l 10 Sep 2019)
Copyright (c) ArangoDB GmbH

Command-line history will be persisted when the shell is exited.
Connected to ArangoDB 'http+tcp://127.0.0.1:8529' version: 3.4.11 [SINGLE, server], database: '_system', username: 'root'

Please note that a new minor version '3.7.11' is available
Type 'tutorial' for a tutorial or 'help' to see common examples
127.0.0.1:8529@_system> db._createDatabase("rahamdb");
true
127.0.0.1:8529@_system> db._databases()
[
  "_system",
  "rahamdb"
]
```

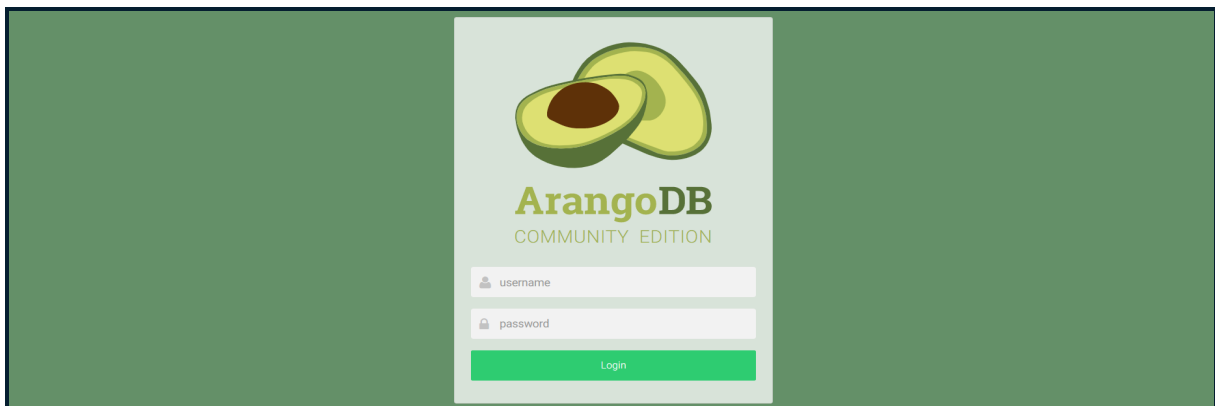
```
vim /etc/arangodb3/arangod.conf
```

```
# Examples:
# endpoint = tcp://0.0.0.0:8529
# endpoint = tcp://172.31.3.196:8529
```

```
sudo systemctl restart arangodb3
```

```
sudo systemctl status arangodb3
```

To Access the Arangodb : publicip:8529



Creds : USERNAME – root PASSWORD – You specified

Click on drop-down you can see 2 dbs one is _system & rahamdb select as you want

PERCONA MYSQL INSTALLATION ON UBUNTU

Percona Distribution for MySQL provides better performance and concurrency for even the most demanding workload. It delivers greater value to MySQL server users with optimized performance, greater performance scalability and availability, enhanced backups, and increased visibility. All Percona software is free and open source.

COMMANDS

```
wget https://repo.percona.com/apt/percona-release_latest.${lsb_release -sc}_all.deb
```

```
sudo dpkg -i percona-release_latest.${lsb_release -sc}_all.deb
```

percona-release setup ps80

sudo apt install percona-server-server

mysql -u root -p

```
mysql> CREATE DATABASE RAHAM;
Query OK, 1 row affected (0.00 sec)

mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| RAHAM    |
| information_schema |
| mysql    |
| performance_schema |
+-----+
4 rows in set (0.00 sec)

mysql> DROP DATABASE RAHAM;
Query OK, 0 rows affected (0.01 sec)

mysql> exit
Bye
root@ip-172-31-3-196:~#
```

MONGO DB INSTALLATION ON UBUNTU

sudo apt install -y mongodb

