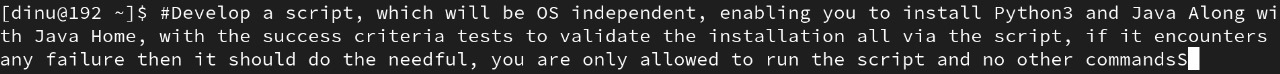
**Installing Java and python3 by single script file….**

**Problem Statement:**



**Script:**

|  |
| --- |
| **#!/bin/bash**  **set -e**  **install\_python\_and\_java() {**  **echo "Checking the operating system..."**  **if [ -f /etc/os-release ]; then**  **. /etc/os-release**  **OS=$ID**  **VERSION\_ID=$VERSION\_ID**  **echo "OS checked. Your OS is $OS"**  **else**  **echo "Unsupported Linux distribution"**  **exit 1**  **fi**  **echo "Installing Python and Java..."**  **case "$OS" in**  **ubuntu)**  **echo "Installing Python for Ubuntu..."**  **sudo apt-get update**  **sudo apt-get install -y python3**  **echo "Python installation finished."**  **echo "Installing Java for Ubuntu..."**  **sudo apt-get install -y openjdk-8-jdk**  **echo "Java installation finished."**  **;;**  **centos|rhel)**  **echo "Installing Python for CentOS/RHEL..."**  **sudo yum install -y epel-release**  **sudo yum install -y python3**  **echo "Python installation finished."**  **echo "Installing Java for CentOS/RHEL..."**  **sudo yum install -y java-1.8.0-openjdk**  **echo "Java installation finished."**  **;;**  **\*)**  **echo "Unsupported Linux distribution: $OS"**  **exit 1**  **;;**  **esac**  **export JAVA\_HOME=$(dirname $(dirname $(readlink -f $(which java))))**  **echo "export JAVA\_HOME=$JAVA\_HOME" >> ~/.bashrc**  **echo 'export PATH="$JAVA\_HOME/bin:$PATH"' >> ~/.bashrc**  **}**  **validate\_installations() {**  **echo "Validating Python and Java installations..."**  **if ! command -v python3 &> /dev/null; then**  **echo "Python3 installation failed"**  **exit 1**  **else**  **echo "Python version: $(python3 --version)"**  **fi**  **if ! command -v java &> /dev/null; then**  **echo "Java installation failed"**  **exit 1**  **else**  **echo "Java version: $(java -version 2>&1)"**  **fi**  **if [[ -z "$JAVA\_HOME" ]]; then**  **echo "JAVA\_HOME is not set"**  **exit 1**  **else**  **echo "JAVA\_HOME is set to: $JAVA\_HOME"**  **fi**  **}**  **main() {**  **install\_python\_and\_java**  **source ~/.bashrc**  **validate\_installations**  **}**  **main** |

**SS:**

