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python script: this is only showing (Linux command df - report file system disk space usage) root size
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# Linux command df - report file system disk space usage
# Example:
# [user5@vm1 ~]$ df -h /
# Filesystem                      Size  Used Avail Use% Mounted on
# /dev/mapper/ocivolume-root   36G  5.0G   31G  15% /
#
# This sample run "df -h /" in Python and get the result
import os

def getDfDescription():
    df = os.popen("df -h /")
    i = 0
    while True:
        i = i + 1
        line = df.readline()
        if i==1:
            return(line.split()[0:6])

def getDf():
    df = os.popen("df -h /")
    i = 0
    while True:
        i = i + 1
        line = df.readline()
        if i==2:
            return(line.split()[0:6])

# Disk information
description = getDfDescription()
disk_root = getDf()

print(disk_root)
print(description[0] + " : " + disk_root[0])
print(description[1] + " : " + disk_root[1])
print(description[2] + " : " + disk_root[2])
print(description[3] + " : " + disk_root[3])
print(description[4] + " : " + disk_root[4])
print(description[5] + " : " + disk_root[5])

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Output:

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[user5@vm1 ~]$ vi filesystem.py   ---> This is the file name
[user5@vm1 ~]$ python3 filesystem.py   ---> This is the file compailation
['/dev/mapper/ocivolume-root', '36G', '5.1G', '31G', '15%', '/']
Filesystem : /dev/mapper/ocivolume-root
Size : 36G
Used : 5.1G
Avail : 31G
Use% : 15%
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Mounted : /
[user5@vm1 ~]$
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Python Script to monitor disk space and send an email in case threshold reached(gmail as provider)

Python Script to monitor disk space usage

```python
threshold = 90
partition = "/"df = subprocess.Popen(["df","-h"], stdout=subprocess.PIPE)
for line in df.stdout:
splitline = line.decode().split()
if splitline[5] == partition:
if int(splitline[4][:-1]) > threshold:
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```python
import subprocess
import smtplib
from email.mime.text import MIMEText

threshold = 90
partition = "/"

def report_via_email():
 msg = MIMEText("Server running out of disk space")
 msg["Subject"] = "Low disk space warning"
 msg["From"] = "admin@example.com"
 msg["To"] = "test@gmail.com"
 with smtplib.SMTP("smtp.gmail.com", 587) as server:
 server.ehlo()
 server.starttls()
 server.login("gmail_user","gmail_password)
 server.sendmail("admin@example.com","test@gmail.com",msg.as_string())

 def check_once():
 df = subprocess.Popen(["df","-h"], stdout=subprocess.PIPE)
 for line in df.stdout:
 splitline = line.decode().split()
 if splitline[5] == partition:
 if int(splitline[4][:-1]) > threshold:
 report_via_email()
check_once()
```