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Bash Shell Check Whether a Directory is Empty or Not

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Q. How do I check whether a directory is empty or not under Linux / UNIX using a shell script? I'd like to take some action if directory is empty.

A. There are many ways to find out if a directory is empty or not under UNIX / Linux bash shell. You can use find command to list only files. For example, following find command will only print file name from /tmp. If there is no output, directory is empty.

[1]

```
$ find "/tmp" -type f -exec echo Found file {} \;
```

Output:

```
Found file /tmp/__.c
Found file /tmp/orbit-vivek/bonobo-activation-server-ior
Found file /tmp/orbit-vivek/bonobo-activation-register.lock
Found file /tmp/__.vsl
Found file /tmp/.X0-lock
Found file /tmp/.wine-1000/server-802-35437d/lock
Found file /tmp/.wine-1000/cxoffice-wine.lock
Found file /tmp/ksocket-vivek/Arts_PlayObjectFactory
Found file /tmp/ksocket-vivek/Arts_SimpleSoundServer
Found file /tmp/ksocket-vivek/secret-cookie
Found file /tmp/ksocket-vivek/Arts_AudioManager
Found file /tmp/ksocket-vivek/Arts_SoundServer
Found file /tmp/ksocket-vivek/Arts_SoundServerV2
Found file /tmp/vcl.XXf8tgOA
Found file /tmp/Tracker-vivek.6126/cache.db
Found file /tmp/gconfd-vivek/lock/ior
```

However, the simplest and most effective way is to use ls command with -A option:

```
$ [ "$(ls -A /path/to/directory)" ] && echo "Not Empty" || echo "Empty"
```

or

```
$ [ "$(ls -A /tmp)" ] && echo "Not Empty" || echo "Empty"
```

Use if..else.fi in a shell script:

```
#!/bin/bash
FILE=""
DIR="/tmp"
# init
# look for empty dir
if [ "$(ls -A $DIR)" ]; then
     echo "Take action $DIR is not Empty"
else
    echo "$DIR is Empty"
fi
# rest of the logic
```

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