

Conceptual Questions

1. Linux is an open source operating system based on unix command. It has become popular because it is a free os , unix based and has the less virus. For example, Android, most servers, routers uses Linux.
2. Open source software is a software that others are free to used legally.
3. Benefits: Free, modifiable
Drawbacks: less support, ads
4. OpenOffice
5. STDIN (0) : input
STDOUT (1) : output
STDERR (2) : errors

Application Questions

```
1.
mkdir tutorials
touch tutorial1
cp tutorial1 tutorial_1
rm tutorial1
2.
cd ~
ln -s ~/work/tutorials/tutorial_1
3.
grep ~/work/tutorials 'stdin' *
4.
find ~/work/tutorials -name "tutorial*" > errors.log
5.
#!/bin/bash
ARG1="$1"

if [ "$ARG1" = "loop" ]; then
    for i in {1..5}
    do
        echo $ARG1
        echo $i >> count.log
        ps > processes.log
    done
fi
```