

Trần Tấn Phát

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LAB8

Bài làm

BT1:

```
GNU nano 6.2                                bg_sleep.sh
#!/bin/bash
# bg_sleep.sh
sleep 300 &                                # ch y background
PID=$!                                     # PID c a ti n tr nh background v a t o
echo "Started sleep 300 in background with PID: $PID"
echo "Job list:"
jobs -l

ubuntu@ubuntu-2274802010644:~/iDragonCloud$ ./bg_sleep.sh
Started sleep 300 in background with PID: 356
Job list:
[1]+  356 Running                  sleep 300 &
ubuntu@ubuntu-2274802010644:~/iDragonCloud$
```

```
ubuntu@ubuntu-2274802010644:~/iDragonCloud$ nano bg_sleep.sh
ubuntu@ubuntu-2274802010644:~/iDragonCloud$ nano bg_sleep.sh
chmod +x bg_sleep.sh
./bg_sleep.sh
# Kiểm tra jobs:
jobs -l
# Giả sử job là %1, đưa về foreground:
fg %1
# Khi ở foreground, Ctrl+C sẽ dừng tiến trình.
Started sleep 300 in background with PID: 357
Job list:
[1]+  357 Running                  sleep 300 &
[1]+  352 Running                  sleep 300 &
sleep 300
```

BT2:

```
GNU nano 6.2                                trap_example.sh
handle_signal() {
local sig="$1"
case "$sig" in
SIGINT) echo "=> B t SIGINT (2) t i PID $$" ;;
SIGTERM) echo "=> B t SIGTERM (15) t i PID $$" ;;
SIGQUIT) echo "=> B t SIGQUIT (3) ^t tho t."; exit 0 ;;
SIGHUP) echo "=> B t SIGHUP (1) " ;;
*) echo "=> B t t n hi ^gu: $sig" ;;
esac
}

trap 'handle_signal SIGINT' SIGINT
trap 'handle_signal SIGTERM' SIGTERM

^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute   ^C Location  ^U Undo       ^A Set Mark   ^] To Bracket
^X Exit      ^R Read File  ^R Replace   ^V Paste     ^J Justify   ^_ Go To Line ^E Redo       ^G Copy       ^_ Where Was
```

```

GNU nano 6.2                                     trap *

handle_signal() {
  local sig="$1"
  case "$sig" in
    SIGINT) echo "Caught SIGINT (2) at PID $$" ;;
    SIGTERM) echo "Caught SIGTERM (15) at PID $$" ;;
    SIGQUIT) echo "Caught SIGQUIT (3) - exiting."; exit 0 ;;
    *) echo "Caught $sig" ;;
  esac
}

trap 'handle_signal SIGINT' SIGINT
trap 'handle_signal SIGTERM' SIGTERM

^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   ^U Undo
^X Exit      ^R Read File  ^_ Replace    ^U Paste      ^J Justify    ^_ Go To Line ^E Redo

```

Bt3

```

GNU nano 6.2                                     parallel_count.sh
n=${1:-20}

count_up() {
  local n=$1
  for ((i=0;i<=n;i++)); do
    printf "UP   : %3d (pid:%d)\n" "$i" "$$"
    sleep 0.2
  done
}

count_down() {
  local n=$1
  for ((i=n;i>=0;i--)); do

```

Read 25 lines

```

^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   ^U Undo      ^A Set Mark   ^] To Bracket
^X Exit      ^R Read File  ^_ Replace    ^U Paste      ^J Justify    ^_ Go To Line ^E Redo      ^E Copy       ^_ Where Was

```

```

./parallel_count.sh 30
Started count_up (PID 410) and count_down (PID 411).
UP   :  0 (pid:409)
DOWN : 30 (pid:409)
UP   :  1 (pid:409)
DOWN : 29 (pid:409)
UP   :  2 (pid:409)
DOWN : 28 (pid:409)

UP   :  3 (pid:409)
DOWN : 27 (pid:409)
UP   :  4 (pid:409)
DOWN : 26 (pid:409)
UP   :  5 (pid:409)
DOWN : 25 (pid:409)
UP   :  6 (pid:409)

```

Bt4:

```

GNU nano 6.2                                     network_scan_if.sh *

set -e
iface="$1"
if [ -z "$iface" ]; then
  echo "Usage: sudo $0 <interface>"
  exit 1
fi

ipinfo=$(ip -o -4 addr show dev "$iface" | awk '{print $4}')
if [ -z "$ipinfo" ]; then
  echo "K h n g t m t h y ^q ^k a c h ^i IPv4 t r n $iface"
  exit 2
fi

```

```

^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   ^U Undo      ^A Set Mark   ^] To Bracket
^X Exit      ^R Read File  ^_ Replace    ^U Paste      ^J Justify    ^_ Go To Line ^E Redo      ^E Copy       ^_ Where Was

```

```
Hit:2 http://archive.ubuntu.com/ubuntu jammy InRelease
Hit:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:4 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
All packages are up to date.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
nmap is already the newest version (7.91+dfsg1+really7.80+dfsg1-2ubuntu0.1).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Interface eth0: 172.19.0.38/16
Quét host trong mạng 172.19.0.38/16 ...
Connection to fit-lab.vlu.edu.vn closed by remote host.
Connection to fit-lab.vlu.edu.vn closed.
❖ (base) trantanphat@Macintosh-5 ~ %
```

Bt5:

```
UW PICO 5.09 File: dns_and_route.sh

host="$1"
if [ -z "$host" ]; then
    echo "Usage: $0 <domain>"
    exit 1
fi

echo "Resolving IP addresses for $host ..."
if command -v dig >/dev/null 2>&1; then
    dig +short "$host"
elif command -v host >/dev/null 2>&1; then
    host "$host" | awk '/has address/ {print $4}'
else

```

Get Help

Exit

WriteOut

Justify

Read File

Where is

Prev Pg

Next Pg

Cut Text

UnCut Text

Cur Pos

To Spell

```
(base) trantanphat@Macintosh-5 ~ % sudo apt update
sudo apt install -y dnsutils traceroute
chmod +x dns_and_route.sh
./dns_and_route.sh github.com
```

```
20.205.243.166

Traceroute to github.com:
traceroute to github.com (20.205.243.166), 64 hops max, 40 byte packets
 1 192.168.1.1 (192.168.1.1) 4.418 ms 4.154 ms 4.005 ms
 2 125.235.249.147.adsl.viettel.vn (125.235.249.147) 6.116 ms 7.028 ms 5.781 ms
 3 10.255.38.215 (10.255.38.215) 6.294 ms
 10.255.38.221 (10.255.38.221) 7.081 ms
 10.255.38.219 (10.255.38.219) 7.675 ms
 4 localhost (27.68.237.138) 5.838 ms
 localhost (27.68.237.138) 5.568 ms 6.447 ms
 5 localhost (27.68.237.139) 8.350 ms
```