

```
#!/bin/bash
__acduroy__
```

```
#####
# Description   : A bash script to modify the Linux lsscsi utility.
#               : To list SCSI devices and their attributes
# Usage        : ./mylsscsi.sh
#####
```

```
#declare global variables here
declare -ga diskname
```

```
echo
echo "  Running modified lsscsi utility !!! "
echo
```

```
function getdevices(){
*** declare variables ***
local -i nline    # total lines with 'disk' word content in lsscsi command
local -i ptrline  # pointer to the current line
local -i i        # number of disk/s found
local -a tmpdiskname # array of disk devices
```

```
*** count all disk devices in the system ***
nline=$(lsscsi |grep disk |grep 5:0 |wc -l)
```

```
## for loop to populate array disk ***
```

```
if [ $nline -eq 1 ]
then
    diskname[0]=$(lsscsi |grep disk |cut -c 59-61)
    i=1
else
    nline=$((nline-1))
    for ((i=0; i <= $nline; i++))
    do
        ptrline=$((i+1))
        device=$(lsscsi |grep disk |head -n $ptrline |tail -n 1 |cut -c 59-61)
        tmpdiskname+=("$device")
    done
fi
```

```
*** display all disk devices ***
```

```
#echo $i
#echo ${diskname[@]}
diskname=$(declare -p tmpdiskname)
main
exit 1
}
```

```

function getserialnumber(){
serial=$(sg_inq /dev/$1 |grep -w "serial number:" |cut -c 21-43)
echo $serial
exit 1
}

function getcapacity(){
capacity=$(sg_readcap /dev/$1 |grep -w "Device size" |cut -c 16-60)
echo $capacity
exit 1
}

function main(){
local -i numdevices
local -i ptrnewline
local -i start

# *** program encountered fatal error ***
if [ $? -ne 0 ]
then
    echo "$0: fatal error:" "$@" >&2
    exit 1
else
    #get number of physical disk(s) found in the system
    numdevices=$(lsscsi |grep disk |grep 5:0 |wc -l)
    echo $numdevices " Physical device(s) found !!!"

    eval "declare -a NEWLIST=${diskname#*=}"
    echo "Device Name of Physical Disk(s): " "${NEWLIST[@]}"

    if [ $numdevices -eq 1 ]
    then
        echo "sda"
        serialnumber=$(getserialnumber "sda")
        capacity=$(getcapacity "sda")
        lsscsicmd=$(lsscsi |grep disk)
        echo $lsscsicmd $serialnumber $capacity
    else
        start=1
        for disk in ${!NEWLIST[*]} # ((i=0; i <= $start; i++))
        do
            #echo "$disk: ${NEWLIST[$disk]}"
            ptrnewline=i+1
            serialnumber=$(getserialnumber ${NEWLIST[disk]})
            capacity=$(getcapacity ${NEWLIST[disk]})
        done
    fi
fi
}

```

```
lsscsicmd=$(lsscsi | grep disk | head -n $start | tail -n 1)
echo $lsscsicmd $serialnumber $capacity
start=$((start+1))
done
fi
fi
exit 1
}

getdevices
```