1.

```
grep '^[^:]' /etc/passwd | cut -d: -f1 | sort
```

```
localhost:~# grep '^[^:]' /etc/passwd | cut -d: -f1 | sort
adm
at
bin
cron
cyrus
daemon
dhcp
ftp
games
guest
halt
lp
mail
man
news
nobody
ntp
operator
postmaster
root
shutdown
smmsp
squid
sshd
svn
sync
uucp
```

2.

```
cat /etc/protocols | awk '{print $2, $1}' | sort -nr | head -n5
```

```
localhost:~# cat /etc/protocols | awk '{print $2, $1}' | sort -nr | head -n5
103 pim
98 encap
94 ipip
89 ospf
81 vmtp
localhost:~#
```

3.

```bash
#!/bin/bash
function sep
{
local width=$1
local dash='-'
local bounds=''

for _ in $(seq 1 "$width"); do
bounds="${bounds}${dash}"
done
echo "+${bounds}+"
}
function banner
{
local msg=$1
local lng=${#msg}
local width=$((lng+2))
sep $width
echo "| ${msg} |"
sep $width
}
banner $1
```

```
localhost:~# ./pr3.sh hi
+----+
| hi |
+----+
```

4.

```bash
echo $( \
 cat hello.c \
 | tr '\n' ' ' \
 | grep -Eo "[_a-zA-Z][_a-zA-Z0-9]*" \
 | uniq \
 | sort \
)
```

```
localhost:~# ./pr4.sh
h hello include int main n printf return stdio void world
```

5.

```bash
#!/bin/bash

if [ "$#" -ne 1 ];
 exit 1
fi
COMMAND=$1

if [ ! -f "$COMMAND" ]; then
 exit 1
fi
sudo cp "$COMMAND" /usr/local/bin/
sudo chmod +x /usr/local/bin/"$COMMAND"
echo "$COMMAND copied in /usr/local/bin"
```

```
localhost:~# ./pr5.sh hello.c
hello.c copied in /usr/local/bin
```

6.

```bash
#!/bin/bash

if [ "$# -ne 1 ]; then
 exit 1
fi
file=$1
if [ "$file" != "*.c" ] && [ "$file" != "*.py" ] && [ "$file" != "*.js" ]
 exit 1
fi

if [[ $(head -n 1 $file) == \#* ]]; then
 echo "py"
fi
if [[ $(head -n 1 $file) == \//* ]]; then
 echo "c or js"
fi
```

```
localhost:~# ./pr6.sh testing.c
c or js
```

7.

```
#!/bin/bash
if [ "$#" -ne 1 ]; then
        exit 1
fi

find "$1" -type f | while read -r file; do sha256sum "$file"
done | sort | uniq -w64 -d
```

```
localhost:~# ./pr7.sh /usr/local/bin
```

8.

```
#!/bin/bash

if [ "$#" -ne 2 ]; then
 exit 1
fi
CATALOG="$1"
ARCHIVE="$2"

tar -cf "$ARCHIVE.tar" $(find . -maxdepth 1 -type f -name "*.$CATALOG")

echo "Archive '$ARCHIVE.tar' created."
```

```
localhost:~# ./pr8.sh txt asd
Archive 'asd.tar' created.
```

9.

```
#!/bin/bash

# если аргументов не равно 2
if [ "$# -ne 2 ]; then
 exit 1
fi

INPUT="$1"
OUTPUT="$2"
# если ввода нету
if [ ! -f "$INPUT" ]; then
 exit 1
fi

sed 's/    /\t/g' "$INPUT" > "$OUTPUT"
echo "Task complete"
```

```
localhost:~# ./pr9.sh input.txt output.txt
Task complete.
localhost:~#
  GNU nano 4.9.3                    output.txt
hello    world
lol lol
```

10.

```bash
#!/bin/bash

if [ "$#" -ne 1 ]; then
        exit 1
fi
DIR=$1
if [ ! -d "$DIR" ]; then
        echo "ERR"
        exit 1
else
        echo "Searching..."
fi

find "$DIR" -type f -name "*.txt"
```

```
localhost:~# ./pr10.sh ~
Searching...
/root/readme.txt
/root/.mozilla/firefox/j4k7jsk5.default-default/SecurityPreloadState.txt
/root/.mozilla/firefox/j4k7jsk5.default-default/AlternateServices.txt
/root/.mozilla/firefox/j4k7jsk5.default-default/enumerate_devices.txt
/root/.mozilla/firefox/j4k7jsk5.default-default/pkcs11.txt
/root/.mozilla/firefox/j4k7jsk5.default-default/TRRBlacklist.txt
/root/.mozilla/firefox/j4k7jsk5.default-default/SiteSecurityServiceState.txt
```