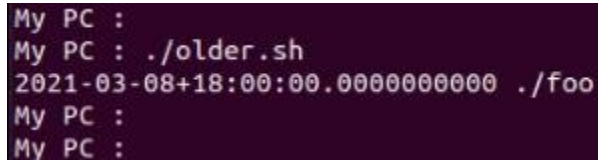


Question 1: older.sh:

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

```
find . -type f -printf '%T+ %p\n' | sort | head -n 1
```



A terminal window with a dark purple background. The prompt 'My PC : ' is shown four times. The first three lines show the execution of 'older.sh' and the output of the 'find' command, which is '2021-03-08+18:00:00.000000000 ./foo'. The fourth line shows the prompt again.

Question 2: funny.sh

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

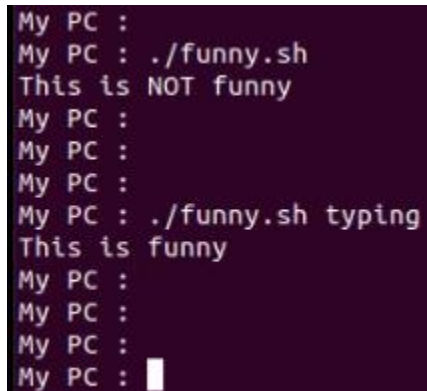
```
if [ "$#" -gt 0 ]; then
```

```
    echo "This is funny"
```

```
else
```

```
    echo "This is NOT funny"
```

```
fi
```



A terminal window with a dark purple background. The prompt 'My PC : ' is shown eight times. The first two lines show the execution of 'funny.sh' and the output 'This is NOT funny'. The next three lines show the prompt again. The sixth line shows the execution of 'funny.sh typing' and the output 'This is funny'. The last three lines show the prompt again.

Question 3:

a) Download file using Curl:

```
curl https://www.staff.hs-mittweida.de/~wuenschi/data/media/compbiolbook/chapter-10-shell-programming--case-cp.sh --output case-cp.sh
```

```

My PC : curl https://www.staff.hs-mittweida.de/~wuenschi/data/media/compbiolbook/chapter-10-shell-programming--case-cp.sh --output case-cp.sh
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total     Spent    Left  Speed
100 321 100 321 0 0 176 0 0:00:01 0:00:01 --:--:-- 176
My PC :
My PC :
My PC : ;s
bash: syntax error near unexpected token `;'
My PC : ls
case-cp.sh funny.sh
My PC :
My PC : cat case-cp.sh
#!/bin/bash
# save as case-cp.sh
# asks if files shall be backedup
# accepts file extension as $1
for i in $(ls *$1); do
    echo "Backup $i? yES/no/QUIT"
    read answer
    case $answer in
        y*) echo "Backup $i"; cp $i $i.bak;;
        n*) echo "Skip $i";;
        q*) echo "Quited"; exit;;
        *) echo "Skip $i";;
    esac
done
My PC : █

```

b) Chime based on minutes:

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

```

printf -v minute "%(%M)T"
if [ "$minute" -ge 20 ] & [ "$minute" -lt 40 ]; then
    echo -ne '\007'
elif [ "$minute" -ge 40 ] & [ "$minute" -lt 60 ]; then
    echo -ne '\007'
    sleep 1
    echo -ne '\007'
else
    echo "no chime"
fi

```

```

My PC :
My PC : ./chime_q3_b.sh
My PC :
My PC : ./chime_q3_b.sh
My PC :
My PC : ./chime_q3_b.sh
My PC :
My PC :

```