1. $ ./greeting.sh

```bash
#!/bin/bash
#from the date command
#take the information about time (and precisely about the hour)
#which is stored in field 12 and 13
hour=`date | cut -c12-13`

#provide date in some nice format
dat=`date +"%A %d in %B of %Y (%r)"`

#Before noon
if [ $hour -lt 12 -a $hour -ge 6 ]
then
    echo "Good Morning $USER, Have nice day!"
fi

#between noon and 4pm
if [ $hour -gt 12 -a $hour -le 16 ]
then
    echo "Good Afternoon $USER"
fi

#from 4pm till 10 pm
if [ $hour -gt 16 -a $hour -le 22 ]
then
    echo "Good Evening $USER "
fi

#from 10pm on
if [ $hour -gt 22 -o $hour -lt 6 ]
then
    echo "You should be sleeping now. Good Night!"
fi

echo -e "This is $dat"
```

2. $ ./greeting1.sh

```bash
#!/bin/bash

#Before noon
function bn {
if [ $hour -lt 12 -a $hour -ge 6 ]
then
    echo "Good Morning $USER, Have nice day!"
fi
```

```
}

#between noon and 4pm
function bna4 {
if [ $hour -gt 12 -a $hour -le 16 ]
then
    echo "Good Afternoon $USER"
fi
}

#from 4pm till 10 pm

function f4t10 {
if [ $hour -gt 16 -a $hour -le 22 ]
then
    echo "Good Evening $USER "
fi
}

#from 10pm on
function f10o {
if [ $hour -gt 22 -o $hour -lt 6 ]
then
    echo "You should be sleeping now. Good Night!"
fi
}


#from the date command
#take the information about time (and precisely about the hour)
#which is stored in field 12 and 13
hour=`date | cut -c12-13`

#provide date in some nice format
dat=`date +"%A %d in %B of %Y (%r)"`

bn $hour
bna4 $hour
f4t10 $hour
f10o $hour

echo -e "This is $dat"
```

3.
```
#/bin/bash -l

cp /apps/leuven/training/HPC_intro/helloworldmpi.c .
module load foss
mpicc helloworldmpi.c -o hello.exe
```

```
check=2
let check=check+16

test=0

rand=$(( RANDOM % 20 + 1 )); echo $rand

until [ $rand -eq $check ]
do
        rand=$(( RANDOM % 20 + 1 )); echo $rand
        echo $check $rand
        test=`expr $test + 1`
done

echo 'random found in ' $test ' steps'

if [ -e ~/exercise.txt ] ; then
        mpirun -np $check ./hello.exe > exercise.txt
else
        touch exercise.txt
        mpirun -np $check ./hello.exe > exercise.txt
fi

while read line; do
        arr=($line)
        echo ${arr[5]}
done < exercise.txt
```