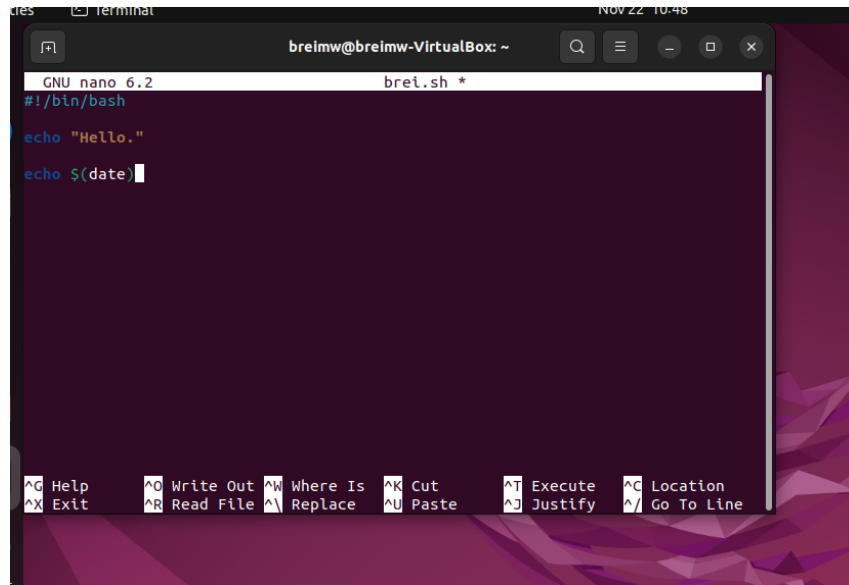


Lab 5 – Shell Scripting

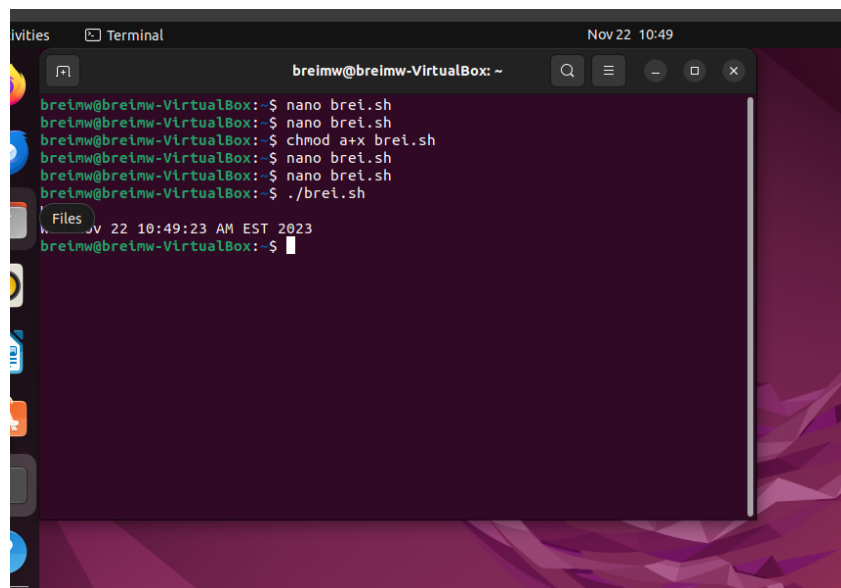
Brei White



A terminal window titled 'breimw@breimw-VirtualBox: ~' showing the nano 6.2 editor. The editor is editing a file named 'brei.sh'. The content of the file is as follows:

```
#!/bin/bash  
echo "Hello."  
echo $(date)
```

The terminal window also displays a status bar at the bottom with various keyboard shortcuts: ^G Help, ^X Exit, ^O Write Out, ^R Read File, ^W Where Is, ^M Replace, ^K Cut, ^U Paste, ^T Execute, ^J Justify, ^C Location, and ^_ Go To Line.



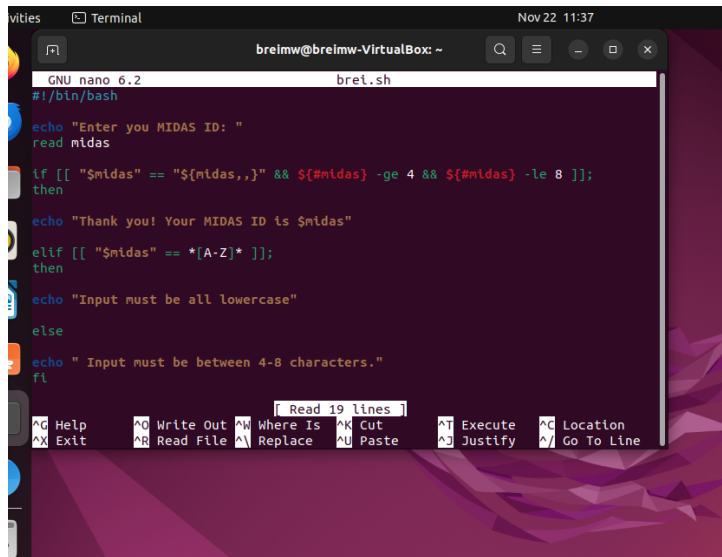
A terminal window titled 'breimw@breimw-VirtualBox: ~' showing the execution of a shell script named 'brei.sh'. The terminal output is as follows:

```
breimw@breimw-VirtualBox:~$ nano brei.sh  
breimw@breimw-VirtualBox:~$ nano brei.sh  
breimw@breimw-VirtualBox:~$ chmod a+x brei.sh  
breimw@breimw-VirtualBox:~$ nano brei.sh  
breimw@breimw-VirtualBox:~$ nano brei.sh  
breimw@breimw-VirtualBox:~$ ./brei.sh  
Nov 22 10:49:23 AM EST 2023  
breimw@breimw-VirtualBox:~$
```

The terminal window also displays a status bar at the bottom with various keyboard shortcuts: ^G Help, ^X Exit, ^O Write Out, ^R Read File, ^W Where Is, ^M Replace, ^K Cut, ^U Paste, ^T Execute, ^J Justify, ^C Location, and ^_ Go To Line.

These are the screenshots of the beginning portion of the assignment/

Task A

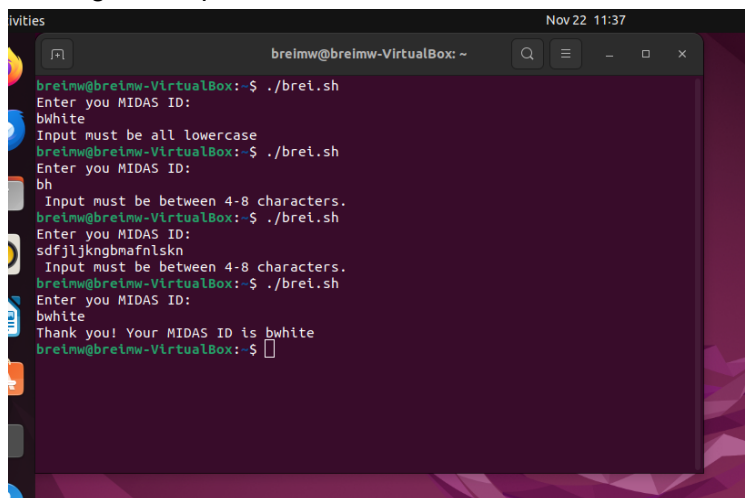


```
GNU nano 6.2 brel.sh
#!/bin/bash

echo "Enter you MIDAS ID: "
read midas

if [[ "$midas" == "${midas,,}" && ${#midas} -ge 4 && ${#midas} -le 8 ]];
then
echo "Thank you! Your MIDAS ID is $midas"
elif [[ "$midas" == *[A-Z]* ]];
then
echo "Input must be all lowercase"
else
echo "Input must be between 4-8 characters."
fi
```

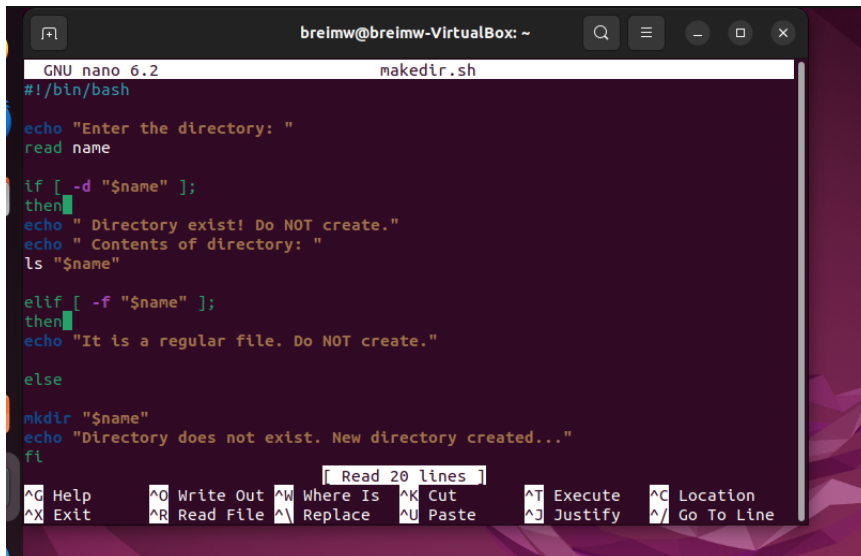
This is a screenshot of the script code. I used an if-else statement to ensure that the input is all lowercase and between 4-8 characters. If the input does not meet the standard, an error message is outputted



```
breimw@breimw-VirtualBox: ~
breimw@breimw-VirtualBox:~$ ./brel.sh
Enter you MIDAS ID:
bwhite
Input must be all lowercase
breimw@breimw-VirtualBox:~$ ./brel.sh
Enter you MIDAS ID:
bh
Input must be between 4-8 characters.
breimw@breimw-VirtualBox:~$ ./brel.sh
Enter you MIDAS ID:
sdfjlkngbmafnskn
Input must be between 4-8 characters.
breimw@breimw-VirtualBox:~$ ./brel.sh
Enter you MIDAS ID:
bwhite
Thank you! Your MIDAS ID is bwhite
breimw@breimw-VirtualBox:~$
```

These are the results after the script is executed.

Task B



```
GNU nano 6.2 makedir.sh
#!/bin/bash

echo "Enter the directory: "
read name

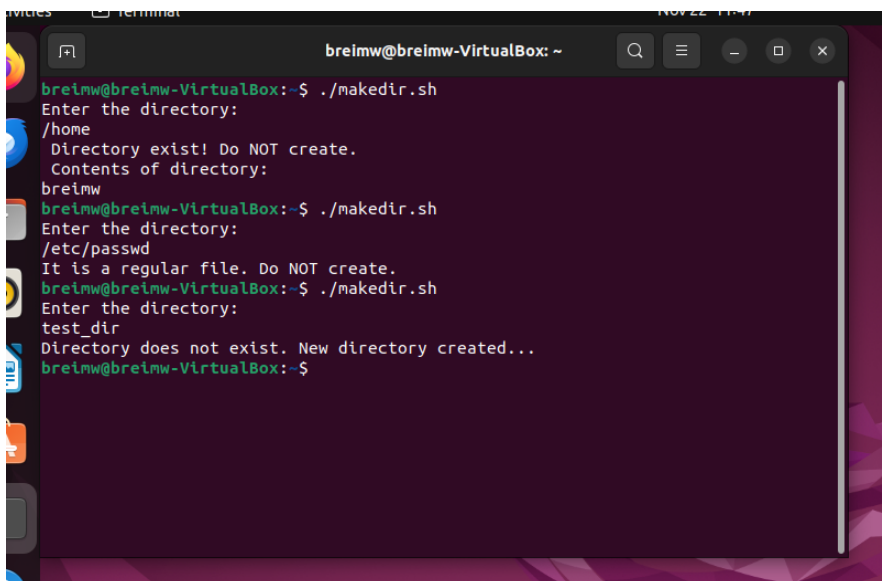
if [ -d "$name" ];
then
echo " Directory exist! Do NOT create."
echo " Contents of directory: "
ls "$name"

elif [ -f "$name" ];
then
echo "It is a regular file. Do NOT create."

else
mkdir "$name"
echo "Directory does not exist. New directory created..."
fi

Read 20 lines
^G Help      ^O Write Out ^W Where Is  ^K Cut      ^T Execute  ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste    ^J Justify  ^_ Go To Line
```

This script code is designed to create a new directory. It utilizes an if-else statement to check whether the directory already exists or if it is a regular file. If the file exists it will display the contents of the file. If it is not a pre existing directory or a regular file, a new directory will be created.



```
breimw@breimw-VirtualBox: ~
breimw@breimw-VirtualBox:~$ ./makedir.sh
Enter the directory:
/home
Directory exist! Do NOT create.
Contents of directory:
breimw
breimw@breimw-VirtualBox:~$ ./makedir.sh
Enter the directory:
/etc/passwd
It is a regular file. Do NOT create.
breimw@breimw-VirtualBox:~$ ./makedir.sh
Enter the directory:
test_dir
Directory does not exist. New directory created...
breimw@breimw-VirtualBox:~$
```

This is the result of the executed script.