

Using File Descriptors

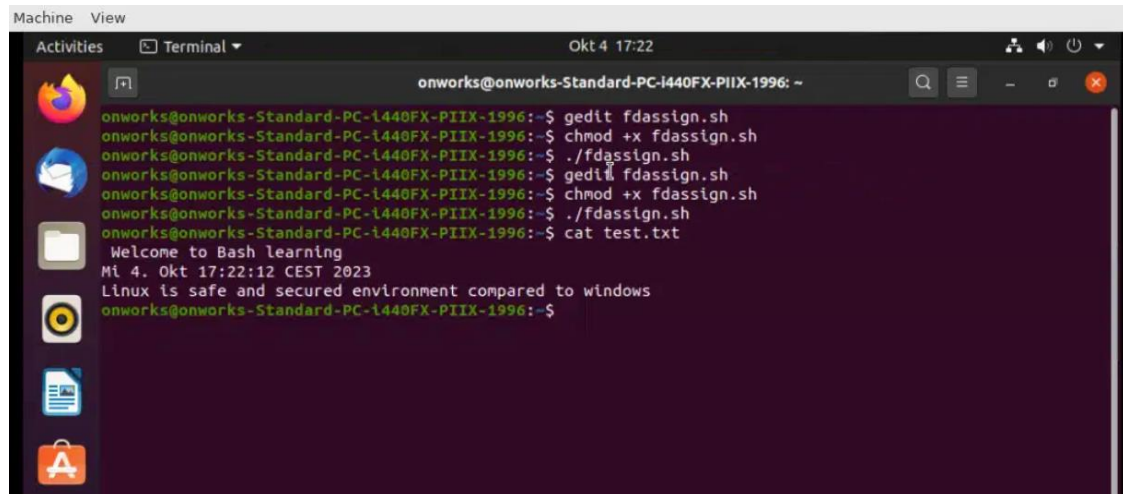
- 1) Try to append few lines to a file test.txt using file descriptor.

#commands in terminal

```
gedit fdassign.sh
chmod +x fdassign.sh
./fdassign.sh
```

#commands in shell script

```
#!/usr/bin/bash
exec 3> test.txt
echo "Welcome to Bash learning"
date >&3
echo "Linux is safe and secure environment compared to windows" >&3
# close fdassign #3
exec 3<&-
```



A terminal window titled "Machine View" showing the execution of the fdassign.sh script. The prompt is "onworks@onworks-Standard-PC-i440FX-PIIX-1996: ~". The commands and their outputs are as follows:

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ gedit fdassign.sh
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ chmod +x fdassign.sh
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ ./fdassign.sh
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ gedit fdassign.sh
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ chmod +x fdassign.sh
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ ./fdassign.sh
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ cat test.txt
Welcome to Bash learning
Mi 4. Okt 17:22:12 CEST 2023
Linux is safe and secured environment compared to windows
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$
```



A text editor window titled "Machine View" showing the content of the fdassign.sh script. The prompt is "onworks@onworks-Standard-PC-i440FX-PIIX-1996: ~". The content of the script is as follows:

```
1#!/usr/bin/bash
2exec 3> test.txt
3echo " Welcome to Bash learning" >&3
4date >&3
5echo "Linux is safe and secured environment compared to windows" >&3
6# close fdassign #3
7exec 3<&-
8
```

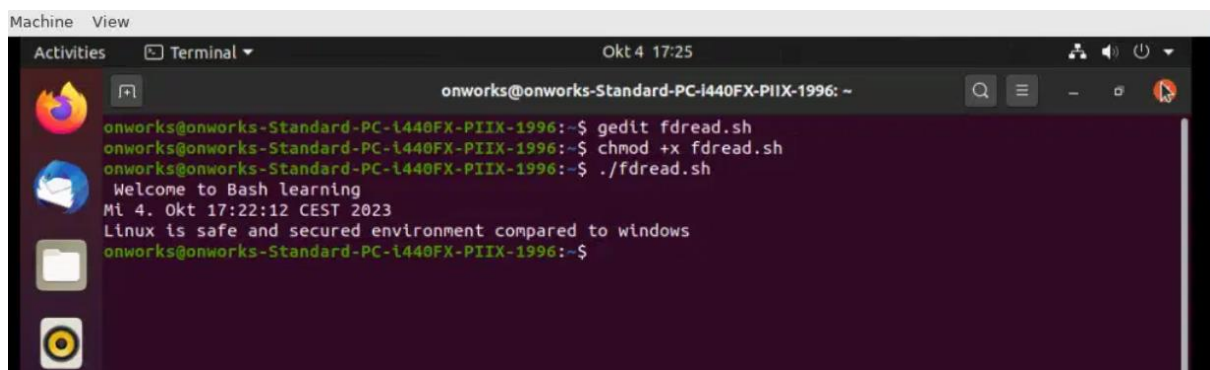
2) Display the content of the file using file descriptor.

#commands in terminal

```
gedit fdread.sh  
chmod +x fdread.sh  
./fdread.sh
```

#commands in shell script

```
#!/bin/bash  
exec 3<test.txt  
cat <&3  
#close fdread #3  
exec 3<&-
```



A terminal window titled "Machine View" with a dark purple background. The window shows the execution of the fdread.sh script. The prompt is "onworks@onworks-Standard-PC-i440FX-PIIX-1996: ~". The commands entered are: "gedit fdread.sh", "chmod +x fdread.sh", and "./fdread.sh". The output of the script is displayed, showing a welcome message and the date and time.

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ gedit fdread.sh  
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ chmod +x fdread.sh  
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ ./fdread.sh  
Welcome to Bash learning  
Mi 4. Okt 17:22:12 CEST 2023  
Linux is safe and secured environment compared to windows  
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$
```



A text editor window titled "Text Editor" with a dark background. The window shows the content of the fdread.sh script. The prompt is "onworks@onworks-Standard-PC-i440FX-PIIX-1996: ~". The commands entered are: "#!/bin/bash", "exec 3<test.txt", "cat <&3", "#close fdread #3", and "exec 3<&-".

```
1#!/bin/bash  
2  
3exec 3<test.txt  
4cat <&3  
5#close fdread#3  
6exec 3<&-
```