



**Spring 2024**

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Class Section: **A**

“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work.”

Submitted to:

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**Department of Computer Systems Engineering**  
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## LAB 2: SHELL Programming (Part I)

## Objectives:

The aim of this laboratory is to learn and practice SHELL scripts by writing small SHELL programs.

The following are the primary objectives of this lab session:

- Understanding what a SHELL script.
- What is a SHELL script.
- Different kinds of SHELLs in UNIX.
- Why and where it is used.
- First simple SHELL script
- SHELL variables.
- User defined variables.
- System variables.
- Read only variables and wiping out variables.
- Assigning values to variables.
- Reading input

### Example 01:

### Commands:



## SSH File



## Example 02:

### Commands:

```
h3@h3pin: ~/Desktop/wslab
File Actions Edit View Help
h3@h3pin:~/Desktop/wslab$ cd ..
h3@h3pin:~/Desktop$ ls
File3.txt Lab02 Lab3 Lab4
h3@h3pin:~/Desktop$ cd Lab02
h3@h3pin:~/Desktop/wslab/Lab02$ nano script.sh
h3@h3pin:~/Desktop/wslab/Lab02$ ./script.sh
2024-02-15 14:16:10
h3@h3pin:~/Desktop/wslab/Lab02$ chmod 777 script.sh
h3@h3pin:~/Desktop/wslab/Lab02$ ./script.sh
File3.txt File3.sh W1.sh script.sh
/home/h3/Desktop/wslab/Lab02
h3$
h3@h3pin:~/Desktop/wslab/Lab02$ nano sct.sh
h3@h3pin:~/Desktop/wslab/Lab02$ chmod 777 sct.sh
h3@h3pin:~/Desktop/wslab/Lab02$ ./sct.sh
Enter Your Name:
Hanson Zaid Jahan
Welcome Hanson Zaid Jahan
h3@h3pin:~/Desktop/wslab/Lab02$
```

### SSH File:

```
h3@h3pin: ~/Desktop/wslab/Lab02
File Actions Edit View Help
GNU nano 2.9.3 script.sh
echo "Enter Your Name:"
read name
echo "Welcome $name"
h3@h3pin:~/Desktop/wslab/Lab02$
```

## Example 03:

### Commands:

```
h3@h3pin: ~/Desktop/wslab/Lab02
File Actions Edit View Help
h3@h3pin:~/Desktop$ cd wslab
h3@h3pin:~/Desktop/wslab$ cd ..
h3@h3pin:~/Desktop$ ls
File3.txt Lab02 Lab3 Lab4
h3@h3pin:~/Desktop$ cd Lab02
h3@h3pin:~/Desktop/wslab/Lab02$ nano task3.sh
h3@h3pin:~/Desktop/wslab/Lab02$ ./task3.sh
Could not find command-not-found database. Run 'sudo apt update' to populate it.
task3.sh: command not found
h3@h3pin:~/Desktop/wslab/Lab02$ nano task3.sh
h3@h3pin:~/Desktop/wslab/Lab02$ ./task3.sh
Enter Your Surname:
Followed By Your First Name:Zaid
Enter The First Name Now,
Hanson
Welcome to OCSE, Hanson Zaid.
h3@h3pin:~/Desktop/wslab/Lab02$ nano task3.sh
h3@h3pin:~/Desktop/wslab/Lab02$ ./task3.sh
Enter Your Surname:
Followed By Your First Name:Zaid
Enter The First Name Now,Hanson
Welcome to OCSE, Hanson Zaid.
h3@h3pin:~/Desktop/wslab/Lab02$
```

### SSH File:

```
h3@h3pin: ~/Desktop/wslab/Lab02
File Actions Edit View Help
GNU nano 2.9.3 task3.sh
echo "Enter Your Surname:"
echo "Followed By Your First Name:Zaid"
read name1
echo "Enter The First Name Now,Zaid"
read name2
echo "Welcome to OCSE, $name1 $name2."
h3@h3pin:~/Desktop/wslab/Lab02$
```

### Example 04:

### Commands:

```

kali@kali: ~/Desktop/ansibleLab02
File Actions Edit View Help

[kali@ansible: ~] ~/Desktop/ansibleLab02
$ nano task04.sh

[kali@ansible: ~] ~/Desktop/ansibleLab02
$ chmod 777 task04.sh

[kali@ansible: ~] ~/Desktop/ansibleLab02
$ ./task04.sh
Enter Source File Name
file1.txt
Enter Target File Name
file2.txt

[kali@ansible: ~] ~/Desktop/ansibleLab02
$ cat file2.txt
Hello, this is Hassan Zaib Jattani

[kali@ansible: ~] ~/Desktop/ansibleLab02
$

```

### SSH File:

nc@kali: ~/Desktop/nc64bit64

File Actions Edit View Help

cmd name f-1

cmd Enter Source File Name

cmd source

cmd Enter Target File Name

cmd target

cp /dev/null /dev/null

10:10 AM

### Example 05:

### Commands:



```
huj@kali:~/Desktop/ecslab/Lab02
File Actions Edit View Help

huj@kali:~/Desktop/ecslab/Lab02$ ./task1.sh
Enter first Value
4
Enter second Value
4
Sum is 4+4

huj@kali:~/Desktop/ecslab/Lab02$
```

## SSH File:

```

C:\Users\user> python test.py
Enter First Value
Enter Second Value
Sum is "expr 5+3"

```

## CSE 302L: Operating Systems Lab

### LAB ASSESSMENT RUBRICS

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Marking Criteria	Exceeds expectation (2.5)	Meets expectation (1.5)	Does not meet expectation (0)	Score
<b>1. Correctness</b>	Program compiles (no errors and no warnings).  Program always works correctly and meets the specification(s).  Completed between 81-100% of the requirements.	Program compiles (no errors and some warnings).  Some details of the program specification are violated, program functions incorrectly for some inputs.  Completed between 41-80% of the requirements.	Program fails to or compile with lots of warnings.  Program only functions correctly in very limited cases or not at all.  Completed less than 40% of the requirements.	
<b>2. Delivery</b>	Delivered on time, and in correct format (disk, email, hard copy etc.)	Not delivered on time, or slightly incorrect format.	Not delivered on time or not in correct format.	
<b>3. Coding Standards</b>	Proper indentation, whitespace, line length, wrapping, comments and references.	Missing some of whitespace, line length, wrapping, comments or references.	Poor use of whitespace, line length, wrapping, comments and references.	
<b>4. Presentation of document</b>	Includes name, date, and assignment title. Task titles, objectives, output screenshots included and good formatting and excellently organized.	Includes name, date, and assignment title. Task titles, objectives, output screenshots included and good formatting.	No name, date, or assignment title included. No task titles, no objectives, no output screenshots, poor formatting.	

Instructor:

Name: Engr. Abdullah Hamid

Signature: \_\_\_\_\_