D Y PATIL INTERNATIONAL UNIVERSITY

SYSTEMS SOFTWARE
SEMESTER-IV
LAB SHEET - 3

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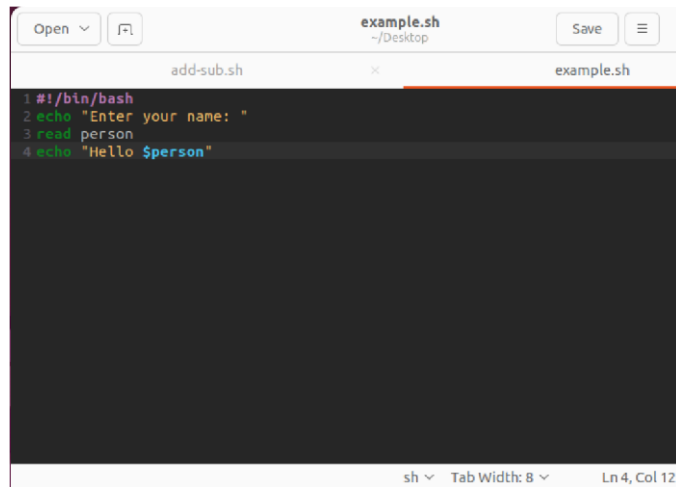
PRN : 20220802043

Div : A1

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1. AIM :

To understand and perform shell scripting.

2. EXPERIMENT :

$ nano example.sh
Program - #!/bin/sh
echo "What is your
name?" read PERSON
echo "Hello, $PERSON" $
./example.sh
bash: permission denied: ./example.sh
$ chmod 777 example.sh
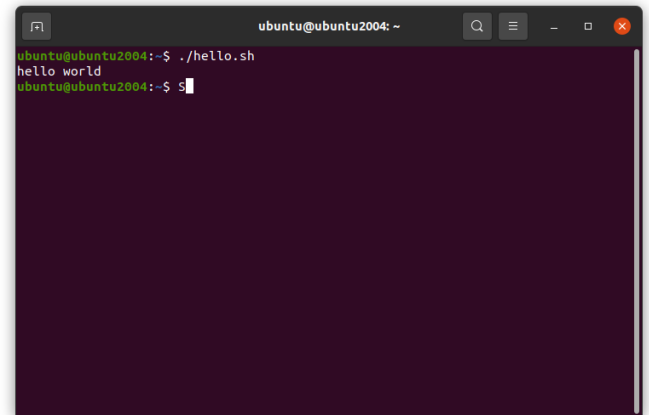*$ ./example.sh*
Output -
What is your name?
sam
Hello, sam

Question 1: Print Hello (name)

Input:

```
Open ⌄          example.sh          Save  ≡
                ~/Desktop

add-sub.sh                  ×      example.sh

1 #!/bin/bash
2 echo "Enter your name: "
3 read person
4 echo "Hello $person"




                        sh ⌄  Tab Width: 8 ⌄      Ln 4, Col 12
```
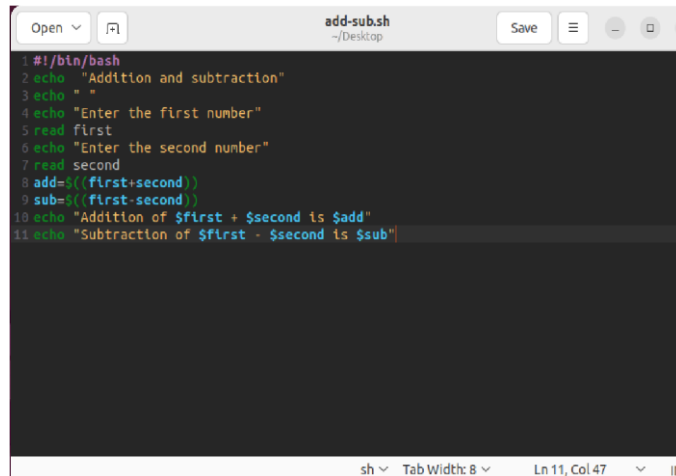
Output:

```
ubuntu@ubuntu2004: ~

ubuntu@ubuntu2004:~$ ./hello.sh
hello world
ubuntu@ubuntu2004:~$ S
```
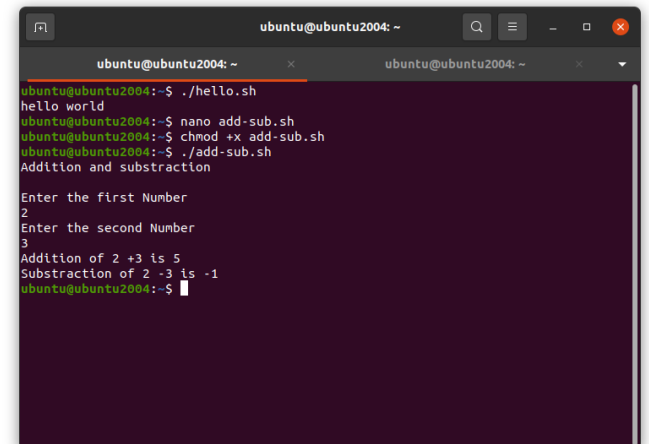
Question 2: Addition and subtraction of two numbers

Input:

```
Open ⌄          add-sub.sh          Save  ≡
                ~/Desktop

1 #!/bin/bash
2 echo  "Addition and subtraction"
3 echo " "
4 echo "Enter the first number"
5 read first
6 echo "Enter the second number"
7 read second
8 add=$((first+second))
9 sub=$((first-second))
10 echo "Addition of $first + $second is $add"
11 echo "Subtraction of $first - $second is $sub"




                        sh ⌄  Tab Width: 8 ⌄      Ln 11, Col 47    ⌄   IN
```

Output:

```
ubuntu@ubuntu2004: ~

ubuntu@ubuntu2004: ~              ubuntu@ubuntu2004: ~

ubuntu@ubuntu2004:~$ ./hello.sh
hello world
ubuntu@ubuntu2004:~$ nano add-sub.sh
ubuntu@ubuntu2004:~$ chmod +x add-sub.sh
ubuntu@ubuntu2004:~$ ./add-sub.sh
Addition and substraction

Enter the first Number
2
Enter the second Number
3
Addition of 2 +3 is 5
Substraction of 2 -3 is -1
ubuntu@ubuntu2004:~$
```

Question 3: Swapping of two nos using the third variable and without the third variable.

Using 3rd variable:-

Input:


```
#!/bin/bash
echo "swap with variable"
echo " "
echo "Enter the first number"
read first
echo "Enter the second number"
read second

echo "Before swap : first element is $first and second element is $second "
temp=$first
first=$second
second=$temp

echo "After swap : first element is $first and second element is $second "
```

Output:


```
Addition and substraction

Enter the first Number
2
Enter the second Number
3
Addition of 2 +3 is 5
Substraction of 2 -3 is -1
ubuntu@ubuntu2004:~$ nano swap-without.sh
ubuntu@ubuntu2004:~$ y
y: command not found
ubuntu@ubuntu2004:~$ nano add-sub.sh
ubuntu@ubuntu2004:~$ nano swap-without.sh
ubuntu@ubuntu2004:~$ chmod +x swap-without.sh
ubuntu@ubuntu2004:~$ ./swap-without.sh
Swap with variable

Enter the first Number
5
Enter the second Number
2
Before swap : First element is 5 and second is 2
Before swap : First element is 2 and second is 5
ubuntu@ubuntu2004:~$
```

Without using 3rd variable:-

Input:


```
#!/bin/bash
echo "swap with variable"
echo " "
echo "Enter the first number"
read first
echo "Enter the second number"
read second

echo "Before swap : first element is $first and second element is $second "
((first=first+second))
((second=first-second))
((first=first-second))
echo "After swap : first element is $first and second element is $second "
```

Output:


```
ubuntu@ubuntu2004:~$ ./swap-without.sh
Swap with variable

Enter the first Number
5
Enter the second Number
2
Before swap : First element is 5 and second is 2
Before swap : First element is 2 and second is 5
ubuntu@ubuntu2004:~$ nano swap-without.sh
ubuntu@ubuntu2004:~$ nano swap-with.sh
ubuntu@ubuntu2004:~$ chmod +x swap-with
chmod: cannot access 'swap-with': No such file or directory
ubuntu@ubuntu2004:~$ chmod +x swap-with.sh
ubuntu@ubuntu2004:~$ ./swap-with.sh
Swap with variable

Enter the first Number
5
Enter the second Number
7
Before swap : First element is 5 and second is 7
After swap : First element is 7 and second is 5
ubuntu@ubuntu2004:~$
```