Experiment [4]: [Bash Scripting}

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Aim:

- [To learn basics of bash scripting]

Requirements

- [Any Linux Distro, any kind of text editor (vs code, vim, notepad, nano, etc)]

Theory

- [To learn how to use bash scripting]

procedure & Observations

Exercise 1: [Hello world script]

Task Statement: [Basic Usage of Shell Scripts]

Explanation: [I learrnt how to do the basic shell scripting]

Command(s):

```
#!/bin/bash
echo "Hello, World!"
```

Exercise 2: [Personalized Greeting Script]

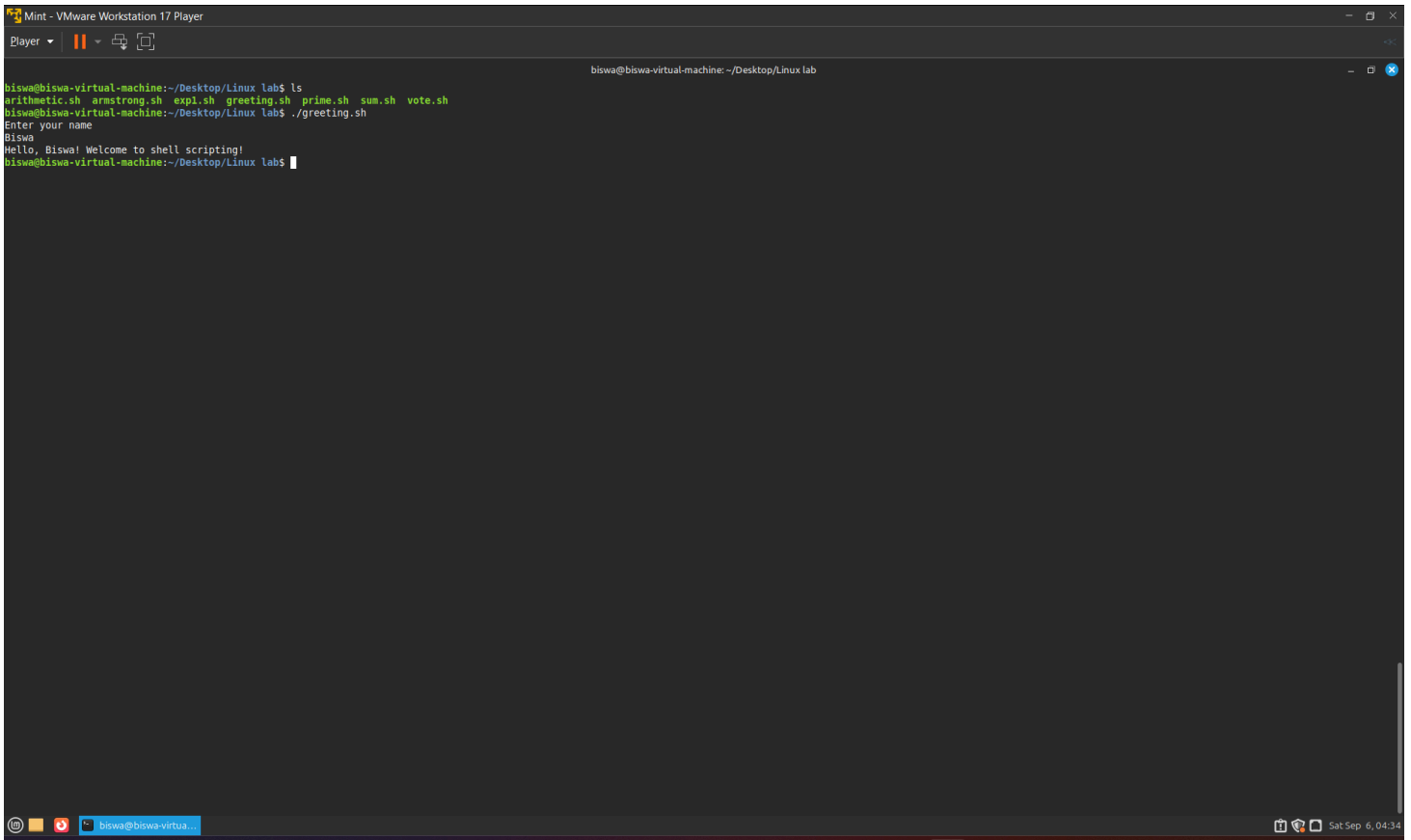## Task Statement: [Basic Shell Script to callout user defined function.]

Explanation: [The script will take input from the user and store it in a variable then give output of the stored value]

Command(s):

```
#!/bin/bash
echo "Enter your name: "
read name      # 'read' takes user input
echo "Hello, $name! Welcome to Shell Scripting."
```

Output:

Result

- [I learnt how to use the basic bash scripting.]

Challenges Faced & Learning Outcomes

- Challenge 1: [I was facing issues in remembering how to call a variable].
- Challenge 2: [I was forgetting how to do looping and take input from users].
- Challenge 3: [I was forgetting how to do proper formatting in bash scripting.]

Learning:

- How to takew input from user
- Learnt proper way to use formatting in bash script

Conclusion

- I learnt how to do bash scripting.

Exercise 3: [Arithmetic Operations in Shell Scripting]

Task Statement:

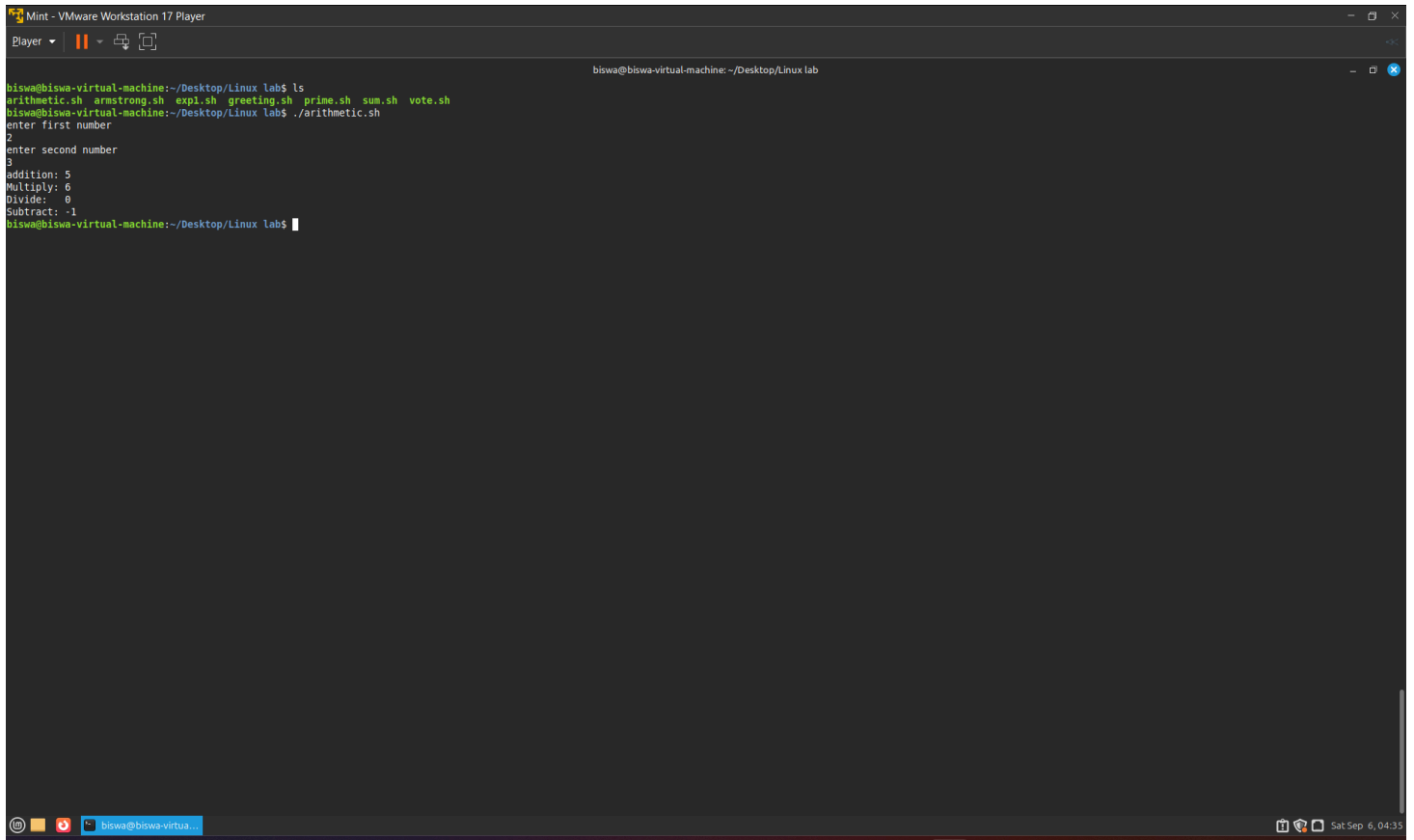- [Using Basic Arithmetic Operations in Shell Scripts]

Explanation:

- I learnt how to run aritmetic bash script

Command(s):

```bash
#!/bin/bash
echo "Enter first number: "
read num1
echo "Enter second number: "
read num2

echo "Addition: $((num1 + num2))"
echo "Subtraction: $((num1 - num2))"
echo "Multiplication: $((num1 * num2))"
echo "Division: $((num1 / num2))"
```

Output:

Exercise 4:
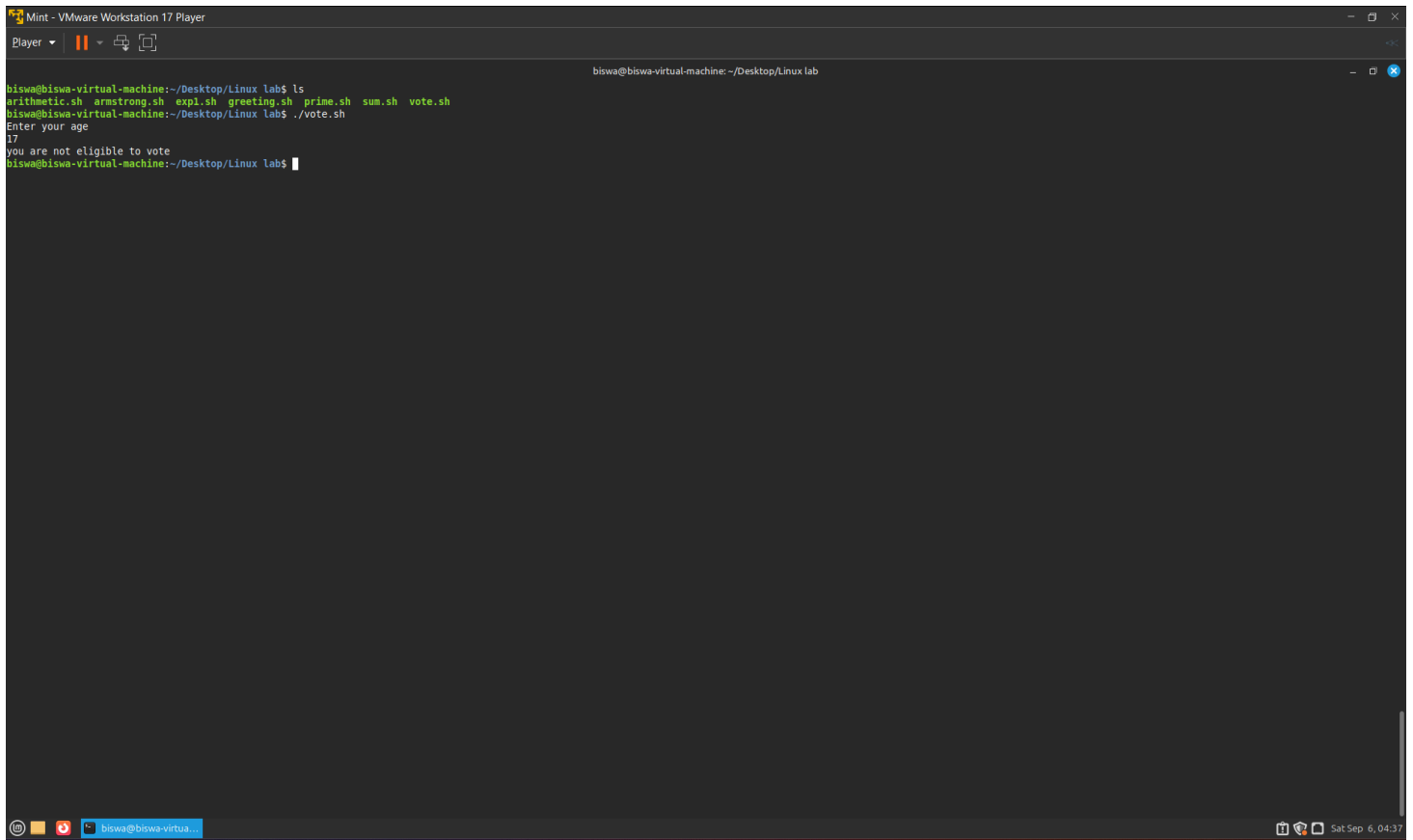
- [Voting Eligibility]

Task Statement:

- [Using if else loop check if the user is eligible to vote or not.]

Command(s):

```bash
#!/bin/bash
echo "Enter your age"
read Biswa
if [ Biswa -ge 18 ]
then
echo "you are eligible to vote"
else
echo "you are not eligible to vote"
fi
```

Output:

Result

- The Exercises were successfully completed for Basic Shell Scripting.