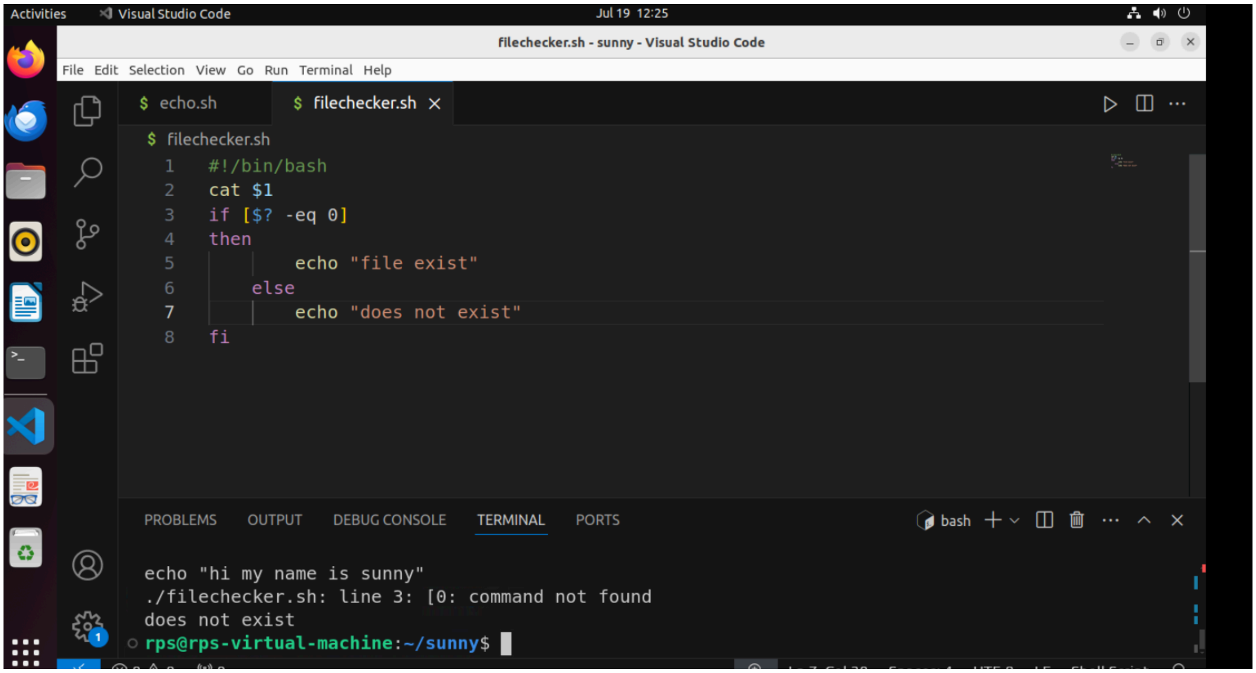
SUNNY KUMAR
19 JULY TASK

LSP(LINUX SYSTEM PROGRAMMING)

Q. writing a shell script called `file_checker.sh` that checks if a file exists or not, takes in a file name as an argument, and prints whether the file exists. The script should suppress the actual output of `cat` and only include the script's output.



```
#!/bin/bash
cat $1
if [$? -eq 0]
then
        echo "file exist"
    else
        echo "does not exist"
fi
```

```
echo "hi my name is sunny"
./filechecker.sh: line 3: [0: command not found
does not exist
rps@rps-virtual-machine:~/sunny$
```

`$?:-`

is a special variable that holds the exit status of the last executed command. The exit status is a numerical value returned by the command when it finishes execution. By convention, an exit status of `0` means that the command was successful, while any non-zero value indicates that an error occurred.

Example

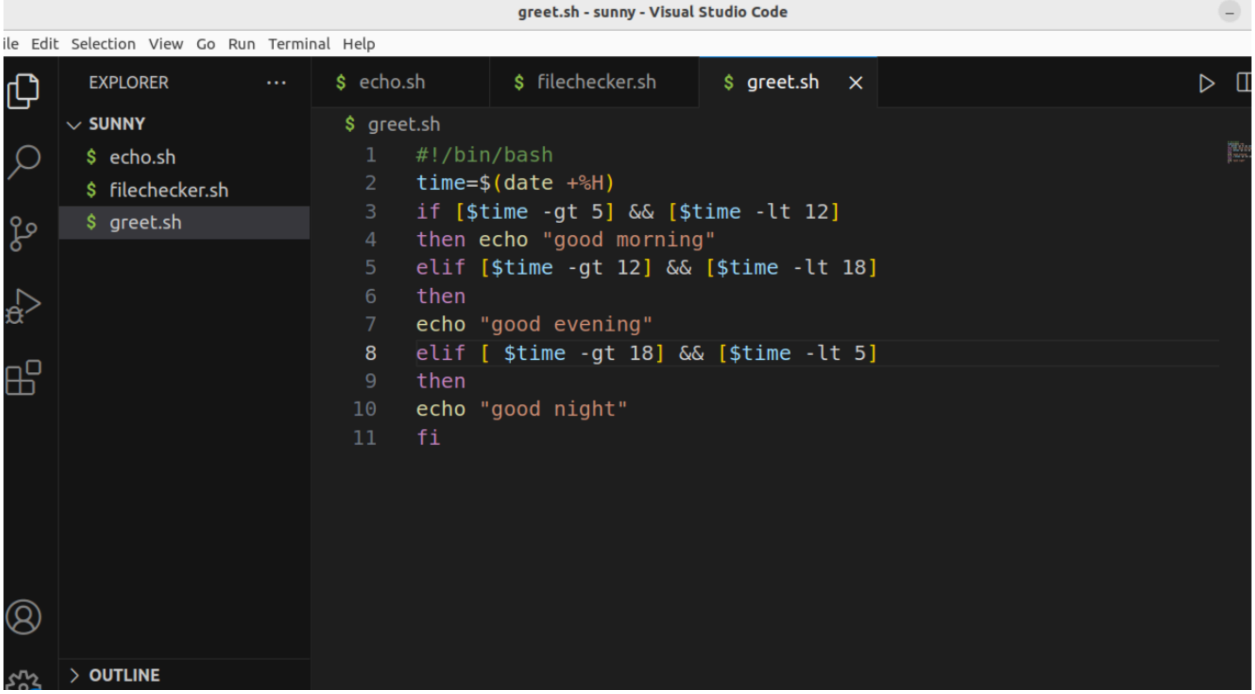
#!/bin/bash

Run a command

```
ls /some/directory

# Check the exit status of the command
if [ $? -eq 0 ]; then
  echo "Command succeeded."
else
  echo "Command failed."
fi
```

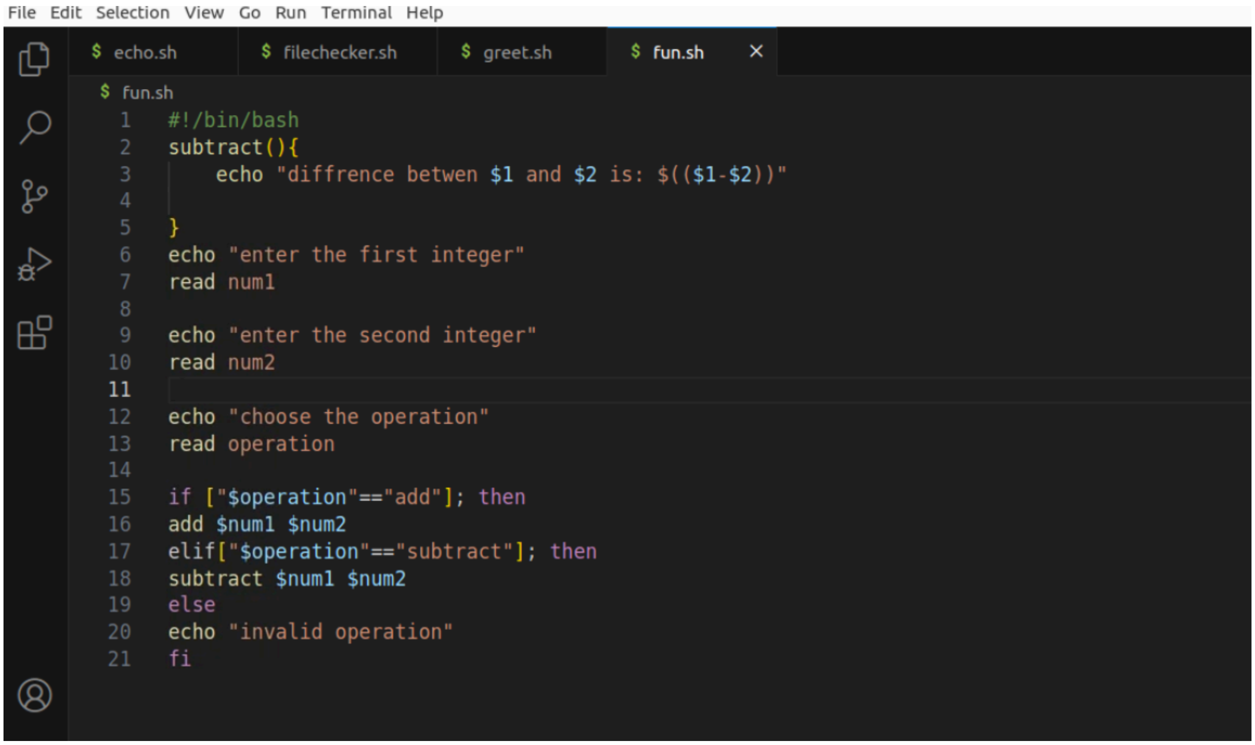
- $$ is the PID of the current process.
- $? is the return code of the last executed command.
- $# is the number of arguments in $*
- $* is the list of arguments passed to the current process

Q.Write a shell script called
timely_greeting
.sh that greets
you based on the current time. The script should call the
date
command, extract the current hour (look into using
%H) and then print
the following greeting based on the time.
If it is between 5AM (05:00) and 12PM (12:00):
Good morning!
If it is between 12PM (12:00) and 6PM (18:00):
Good afternoon!
If it is between 6PM (18:00) and 5AM (5:00):
Good night!



```
#!/bin/bash
time=$(date +%H)
if [$time -gt 5] && [$time -lt 12]
then echo "good morning"
elif [$time -gt 12] && [$time -lt 18]
then
echo "good evening"
elif [ $time -gt 18] && [$time -lt 5]
then
echo "good night"
fi
```

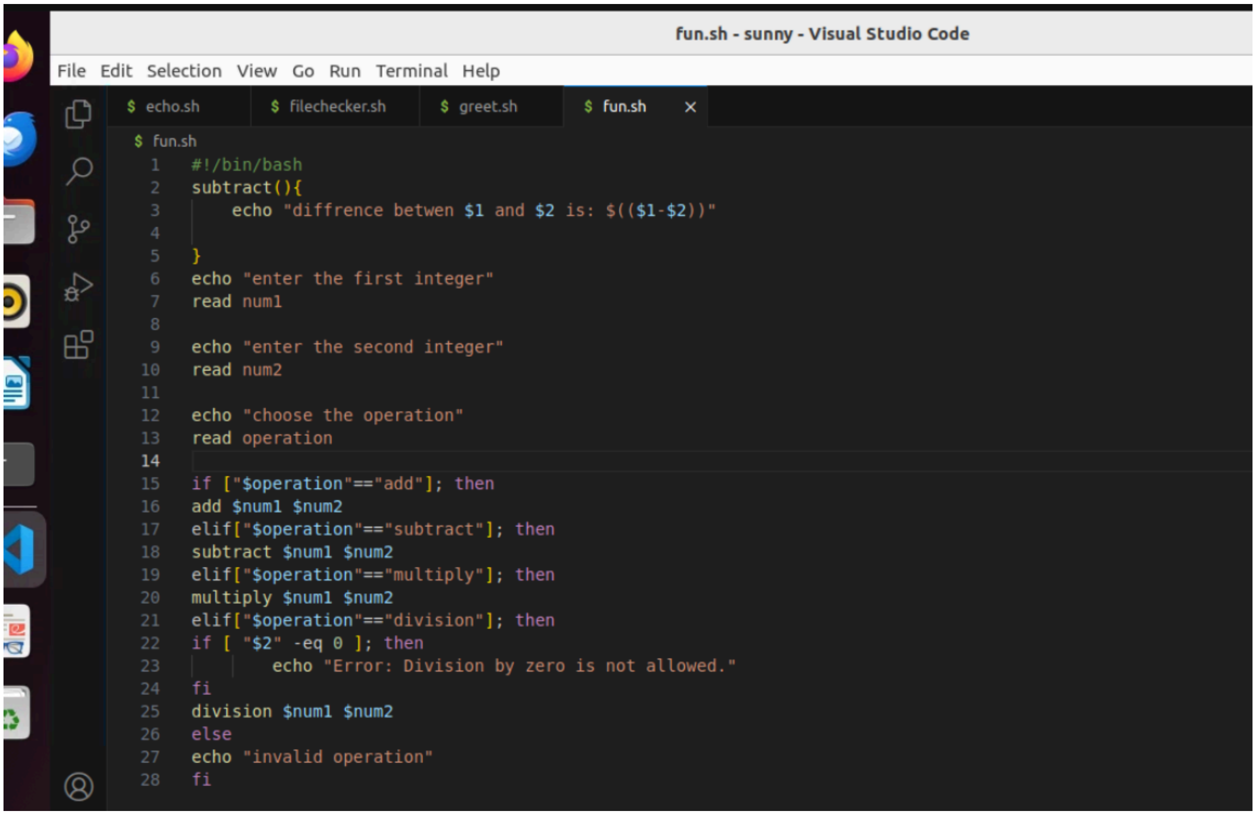
FUNCTION OF ADD AND SUBTRACT IN SHELL SCRIPT



```
#!/bin/bash
subtract(){
    echo "diffrence betwen $1 and $2 is: $(($1-$2))"

}
echo "enter the first integer"
read num1

echo "enter the second integer"
read num2

echo "choose the operation"
read operation

if ["$operation"=="add"]; then
add $num1 $num2
elif["$operation"=="subtract"]; then
subtract $num1 $num2
else
echo "invalid operation"
fi
```

Q

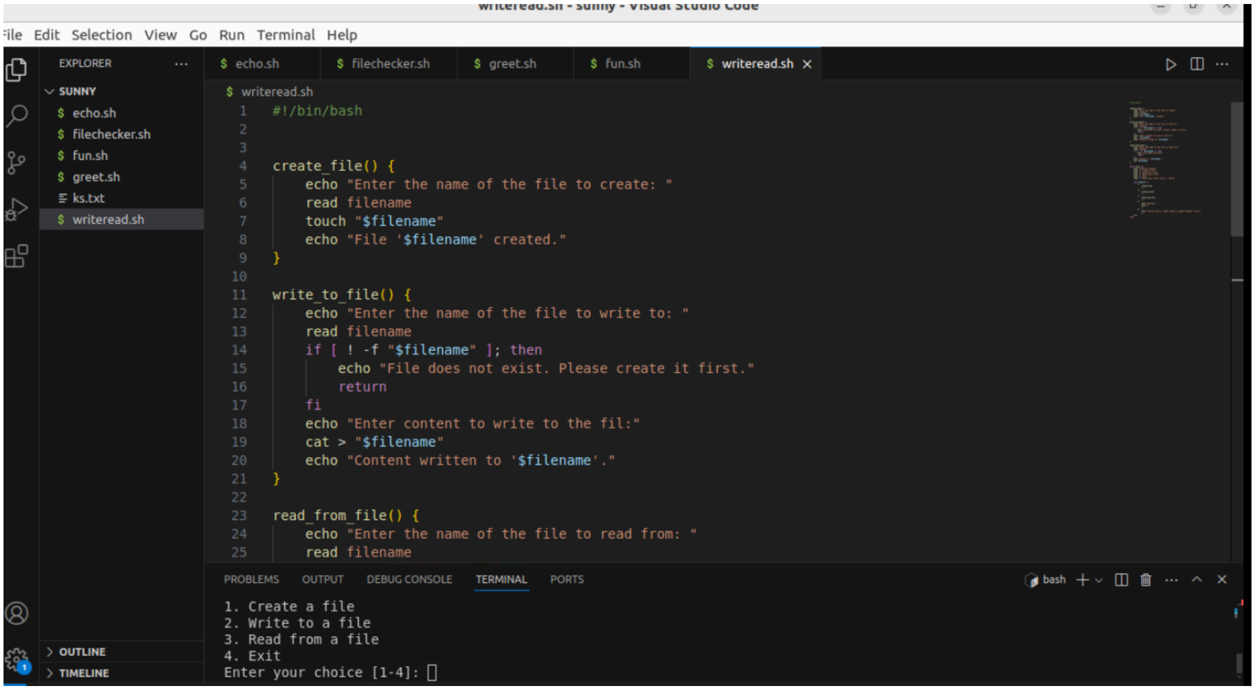
Q. script to include add subtract multiplication and division operations, and handle division by zero appropriately.use if else instead of case


fun.sh - sunny - Visual Studio Code
File Edit Selection View Go Run Terminal Help
$ echo.sh
$ filechecker.sh
$ greet.sh
$ fun.sh
$ fun.sh

```bash
#!/bin/bash
subtract(){
    echo "diffrence betwen $1 and $2 is: $(($1-$2))"

}
echo "enter the first integer"
read num1

echo "enter the second integer"
read num2

echo "choose the operation"
read operation

if ["$operation"=="add"]; then
add $num1 $num2
elif["$operation"=="subtract"]; then
subtract $num1 $num2
elif["$operation"=="multiply"]; then
multiply $num1 $num2
elif["$operation"=="division"]; then
if [ "$2" -eq 0 ]; then
        echo "Error: Division by zero is not allowed."
fi
division $num1 $num2
else
echo "invalid operation"
fi
```

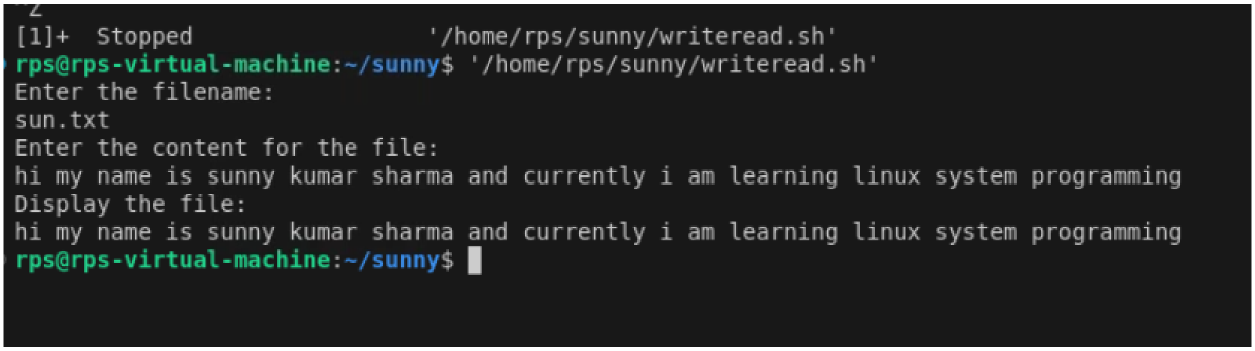
Q.Title: Create, Write, and Read Files Using Shell Script

Objective:
Develop a shell script that can create a file, write user-provided content into the file, and then read and display the content of the file.



```
#!/bin/bash


create_file() {
    echo "Enter the name of the file to create: "
    read filename
    touch "$filename"
    echo "File '$filename' created."
}

write_to_file() {
    echo "Enter the name of the file to write to: "
    read filename
    if [ ! -f "$filename" ]; then
        echo "File does not exist. Please create it first."
        return
    fi
    echo "Enter content to write to the fil:"
    cat > "$filename"
    echo "Content written to '$filename'."
}

read_from_file() {
    echo "Enter the name of the file to read from: "
    read filename
```

```
1. Create a file
2. Write to a file
3. Read from a file
4. Exit
Enter your choice [1-4]: 
```



```
^Z
[1]+  Stopped                 '/home/rps/sunny/writeread.sh'
rps@rps-virtual-machine:~/sunny$ '/home/rps/sunny/writeread.sh'
Enter the filename:
sun.txt
Enter the content for the file:
hi my name is sunny kumar sharma and currently i am learning linux system programming
Display the file:
hi my name is sunny kumar sharma and currently i am learning linux system programming
rps@rps-virtual-machine:~/sunny$ 
```