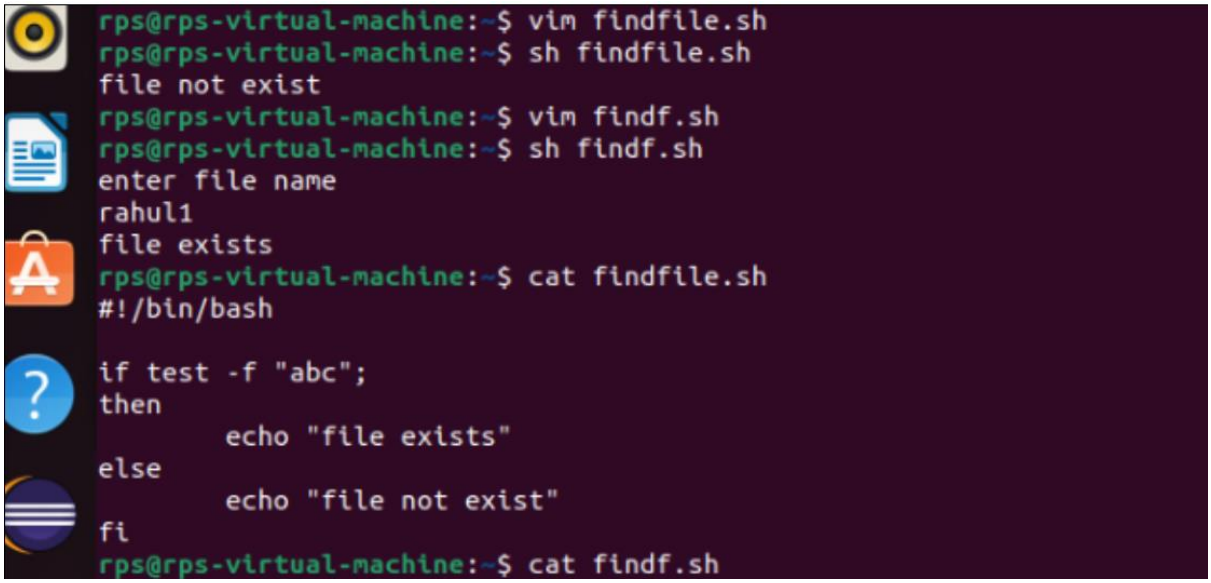
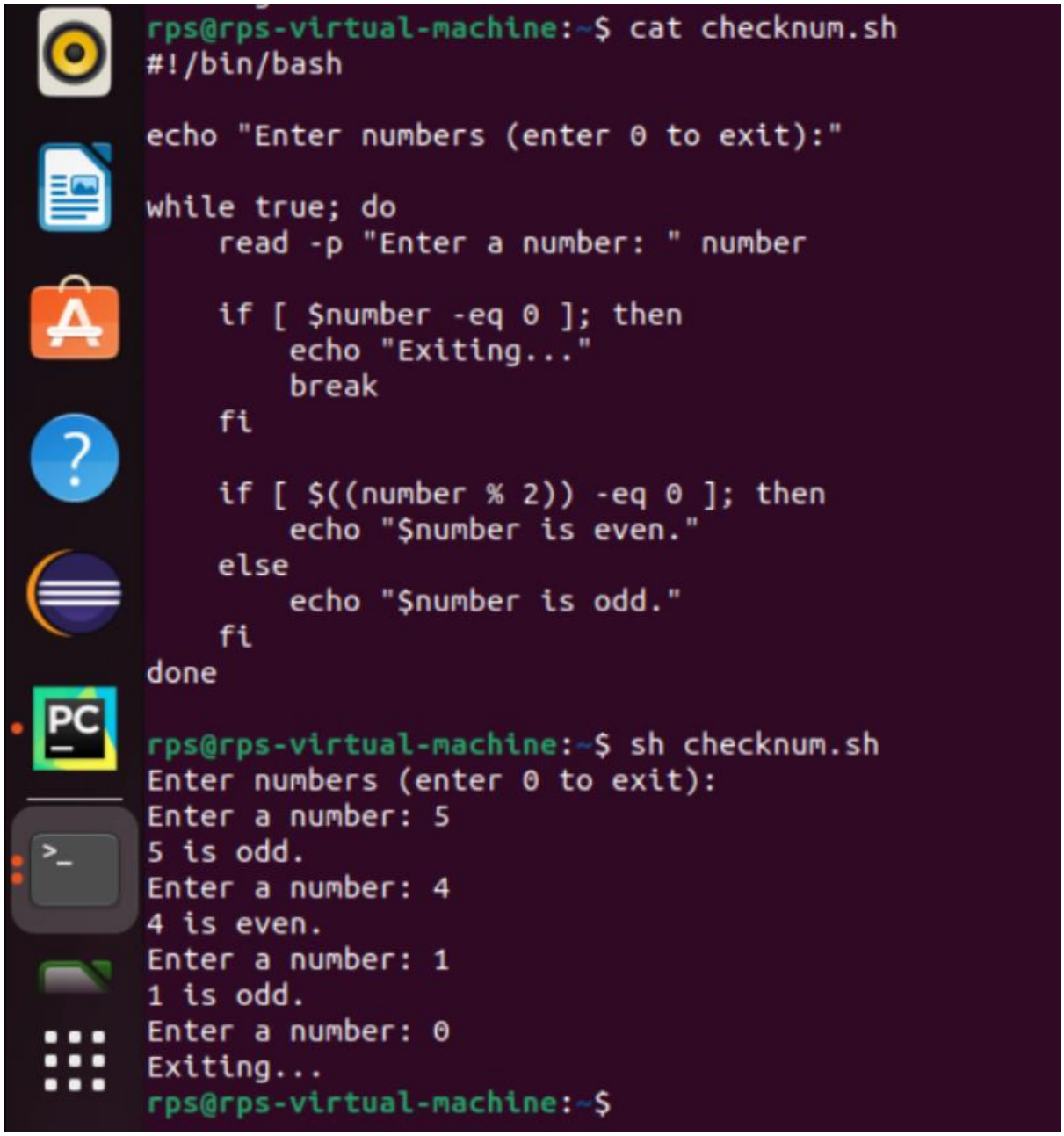
ASSIGNMENT-6.1

Given: Ensure the script checks if a specific file (e.g., myfile.txt) exists in the current directory. If it exists, print "File exists", otherwise print "File not found".



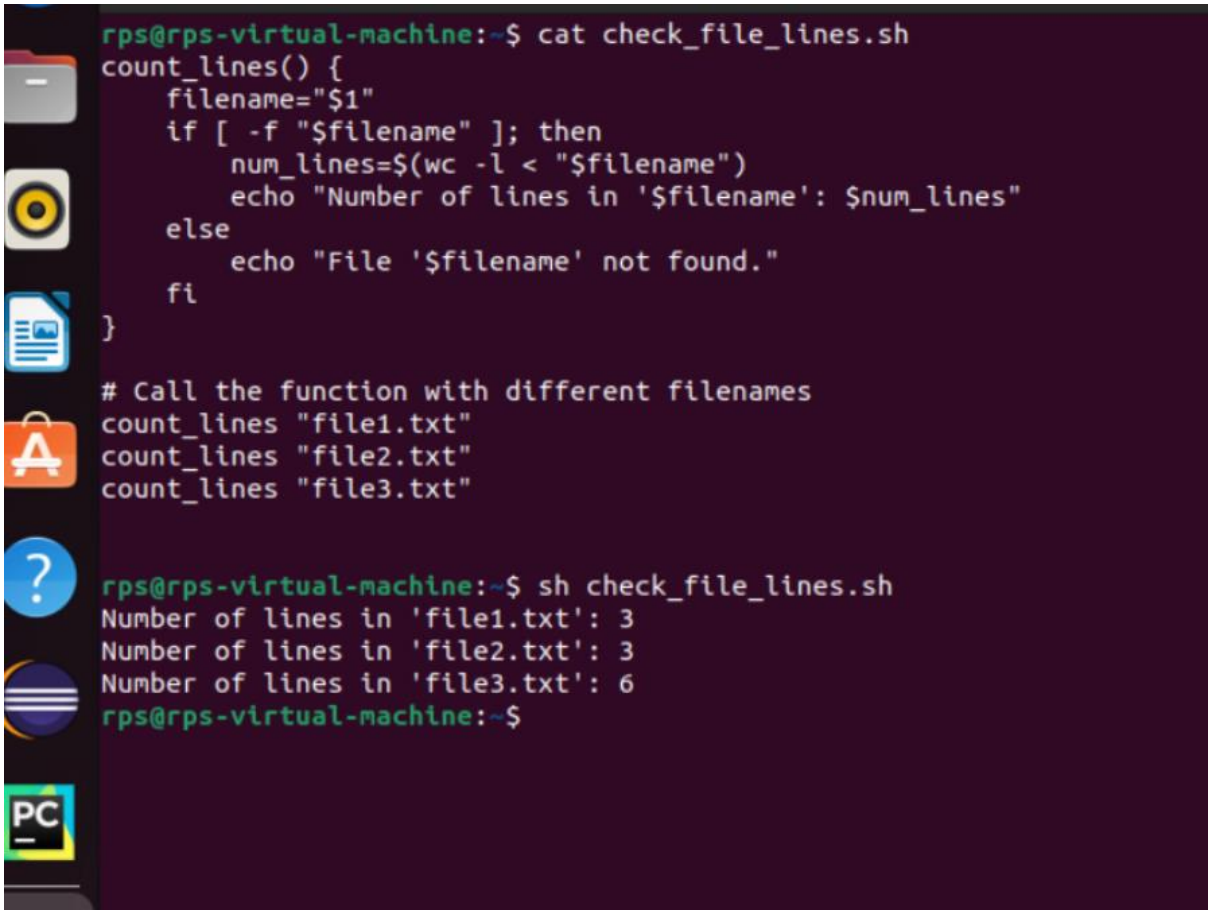
ASSIGNMENT-6.2

Given: Write a script that reads numbers from the user until they enter '0'. The script should also print whether each number is odd or even.



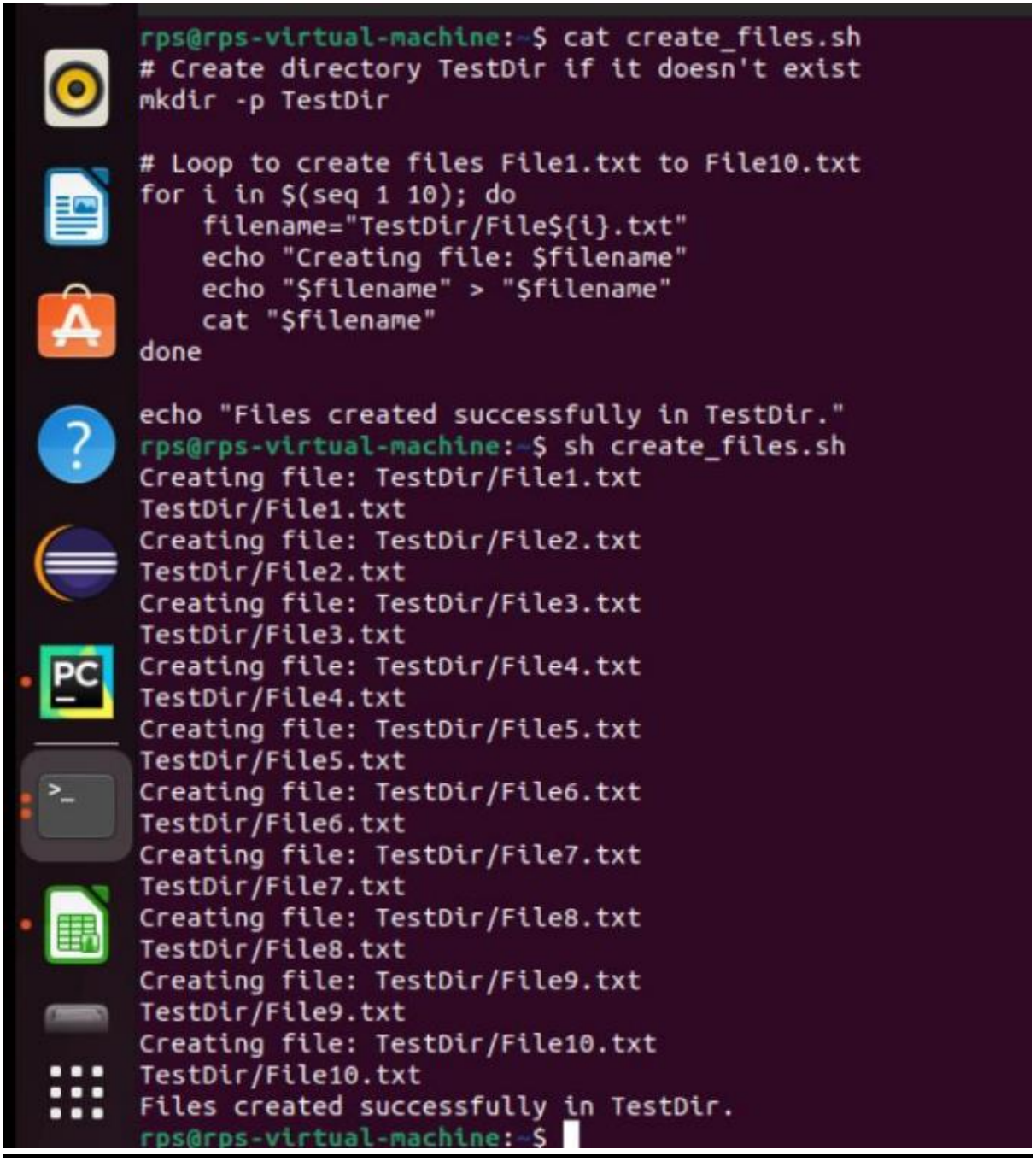
ASSIGNMENT-6.3

Given: Create a function that takes a filename as an argument and prints the number of lines in the file. Call this function from your script with different filenames.



ASSIGNMENT-6.4

Given: Write a script that creates a directory named TestDir and inside it, creates ten files named File1.txt, File2.txt, ... File10.txt. Each file should contain its filename as its content (e.g., File1.txt contains "File1.txt").



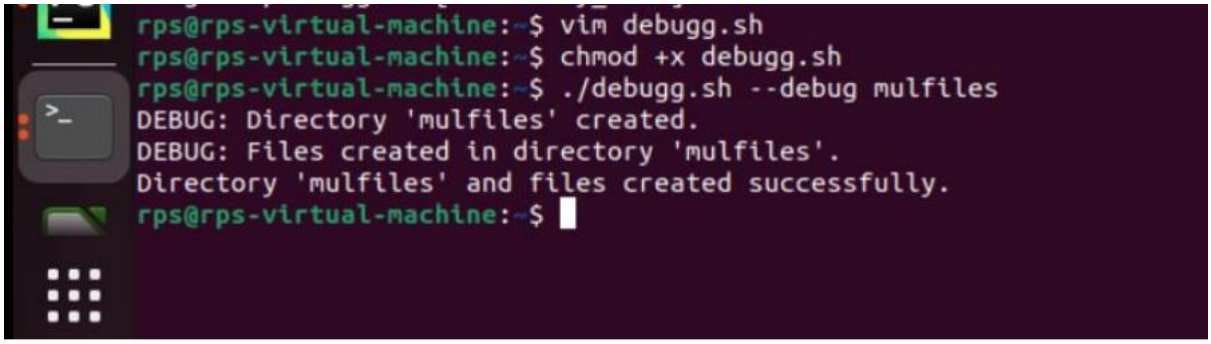
ASSIGNMENT-6.5

Given: Modify the script to handle errors, such as the directory already existing or lacking permissions to create files. Add a debugging mode that prints additional information when enabled.

```
#!/bin/bash

# Function to display usage
display_usage() {
   echo "Usage: $0 [--debug] directory_name"
}

# Function for debugging output
debug() {
   if [ "$DEBUG" = true ]; then
      echo "DEBUG: $1"
   fi
}

# Function to create directory and files
create_directory_and_files() {
   local dir_name=$1

   # Check if directory already exists
   if [ -d "$dir_name" ]; then
      echo "Error: Directory '$dir_name' already exists."
      exit 1
   fi

   # Create directory
   mkdir "$dir_name"
   debug "Directory '$dir_name' created."

   # Check if directory creation successful
   if [ $? -ne 0 ]; then
      echo "Error: Failed to create directory '$dir_name'."
      exit 1
   fi

   # Create files
   touch "$dir_name/file1.txt" "$dir_name/file2.txt" "$dir_name/file3.txt"
   debug "Files created in directory '$dir_name'."
```

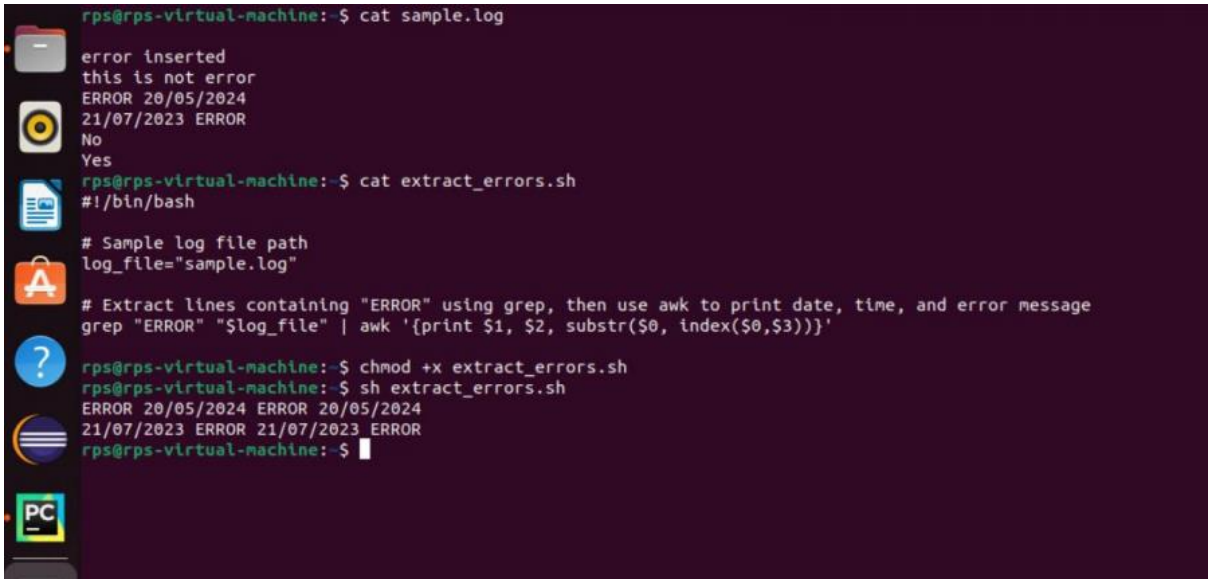
```
    # Check if file creation successful
    if [ $? -ne 0 ]; then
        echo "Error: Failed to create files in directory '$dir_name'."
        exit 1
    fi

    echo "Directory '$dir_name' and files created successfully."
}

# Main script
if [ $# -lt 1 ]; then
    display_usage
    exit 1
fi

# Check if debugging mode enabled
if [ "$1" = "--debug" ]; then
    DEBUG=true
    shift
fi

# Create directory and files
create_directory_and_files "$1"
```

Output:



ASSIGNMENT-6.6

Given: A sample log file, write a script using grep to extract all lines containing "ERROR". Use awk to print the date, time, and error message of each extracted line. Data Processing with sed.



ASSIGNMENT-6.7

Given: Create a script that takes a text file and replaces all occurrences of "old_text" with "new_text". Use sed to perform this operation and output the result to a new file.