

Task 2:

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.

Here's a Linux shell script that reads numbers from the user until they enter '0'. The script also prints whether each number is odd or even:

```
#!/bin/bash

# Function to check if a number is odd or even
check_odd_even() {
    number=$1
    if [ $((number % 2)) -eq 0 ]; then
        echo "The number $number is even."
    else
        echo "The number $number is odd."
    fi
}

# Infinite loop to read numbers from the user
while true; do
    # Read a number from the user
    echo -n "Enter a number (0 to quit): "
    read number

    # Check if the number is 0
    if [ "$number" -eq 0 ]; then
        echo "Goodbye!"
        break
    fi

    # Check if the input is a valid number
    if ! [[ "$number" =~ ^-[0-9]+$ ]]; then
        echo "Please enter a valid number."
        continue
    fi

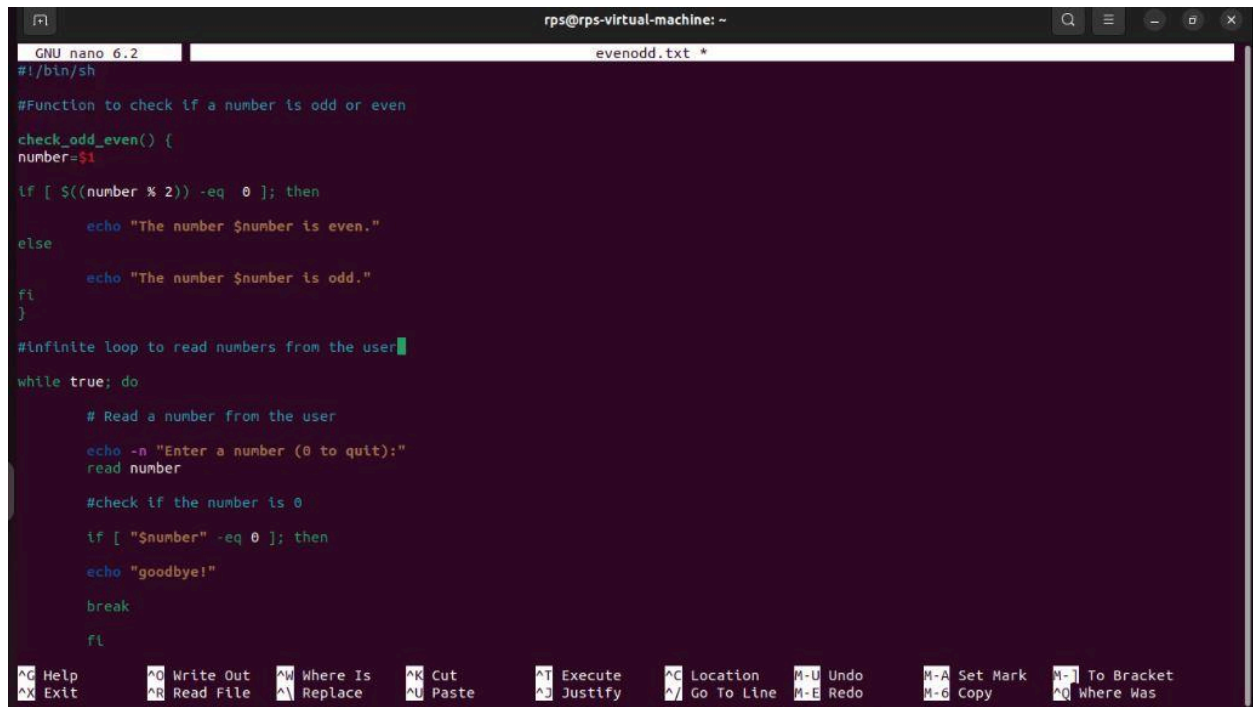
    # Call the function to check if the number is odd or even
    check_odd_even $number
done
```

To use this script, follow these steps:

Step 1: Open a text editor and create a new file (e.g., `evenodd.txt`).

Step 2: Write the script above into the new file.

Step 3: Save the file.



```
GNU nano 6.2 evenodd.txt *
#!/bin/sh

#Function to check if a number is odd or even
check_odd_even() {
number=$1

if [ $((number % 2)) -eq 0 ]; then
    echo "The number $number is even."
else
    echo "The number $number is odd."
fi
}

#Infinite loop to read numbers from the user
while true; do
    # Read a number from the user
    echo -n "Enter a number (0 to quit):"
    read number

    #check if the number is 0
    if [ "$number" -eq 0 ]; then
        echo "goodbye!"
        break
    fi
}
```

Step 4: Make the script executable by running the following command in the terminal:

```
chmod 777 evenodd.txt
```

Step 5: Run the script by typing the following command in the terminal:

```
./evenodd.txt
```

You will be prompted to enter numbers. The script will print whether each number is odd or even. If you enter '0', the script will terminate and print "Goodbye!". If you enter a non-numeric value, the script will prompt you to enter a valid number.

```
rps@rps-virtual-machine: ~  
rps@rps-virtual-machine:~$ nano evenodd.txt  
rps@rps-virtual-machine:~$ chmod 777 evenodd.txt  
rps@rps-virtual-machine:~$ ./evenodd.txt  
./evenodd.txt: 36: Syntax error: end of file unexpected (expecting "done")  
rps@rps-virtual-machine:~$ nano evenodd.txt  
rps@rps-virtual-machine:~$ chmod 777 evenodd.txt  
rps@rps-virtual-machine:~$ ./evenodd.txt  
Enter a number (0 to quit):15  
The number 15 is odd.  
Enter a number (0 to quit):10  
The number 10 is even.  
Enter a number (0 to quit):32  
The number 32 is even.  
Enter a number (0 to quit):1  
The number 1 is odd.  
Enter a number (0 to quit):9  
The number 9 is odd.  
Enter a number (0 to quit):18  
The number 18 is even.  
Enter a number (0 to quit):0  
goodbye!  
rps@rps-virtual-machine:~$
```