



Shell Scripting for Common Tasks

Explore the power of shell scripting! Learn how to count word occurrences, calculate factorials, and list files in a directory.

Word Occurrences: Count and Report

Script 1: Word Occurrences

Example usage: `word_occurrences.sh input.txt`

Expected Output:

`word1: 5 occurrences, word2: 3 occurrences, ...`

Factorial Calculation

Script 2: Factorial Calculation

Example usage: `factorial.sh 5`

Expected Output:

Factorial of 5 is 120

List Files in Directory

Script 3: List Files in Directory

Example usage: `list_files.sh /path/to/directory`

Expected Output:

`file1.txt`

`file2.jpg`

`...`

Mastering Shell Scripting

```
ws.on("message", m => {
  let a = m.split(" ")
  switch(a[0]){
    case "connect":
      if(a[1]){
        if(clients.has(a[1])){
          ws.send("connected");
          ws.id = a[1];
        }else{
          ws.id = a[1]
          clients.set(a[1], {clients: {position: {x: 0, y: 0}, id: 0}})
          ws.send("connected")
        }
      }
    }else{
      let id = Math.random().toString().slice(2, 10)
      ws.id = id;
    }
  }
})
```

Efficiency

Automate repetitive tasks, saving time and effort.

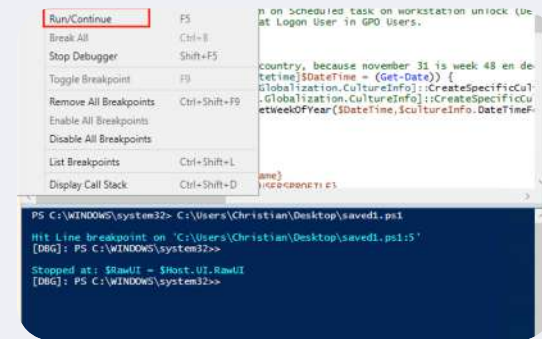
A shell script is...

- A **series** of OS commands for execution
- Stored in a **text** file

```
#!/bin/sh
rm -f /tmp/listing.tmp > /dev/null 2>&1
touch /tmp/listing.tmp
ls -l [a-z]*.doc | sort > /tmp/listing.tmp
lpr -Ppostscript_1 /tmp/listing.tmp
rm -f /tmp/listing.tmp
```

Flexibility

Write scripts that can be executed on different operating systems.



Debugging

Learn techniques to troubleshoot and fix errors in your scripts.

Scripting in Practice



Become a Shell Scripting Expert

Online Resources

Explore tutorials, forums, and documentation for continuous learning.

Practice, Practice, Practice

Sharpen your skills by working on real-world scripting projects.

Collaborate and Share

Join communities to exchange ideas and showcase your scripts.

Take your Shell Scripting Further!



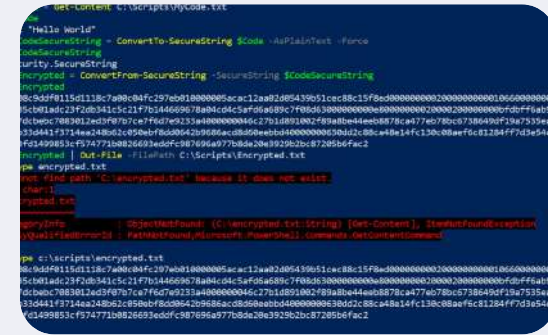
Creative Applications

Use scripting to automate creative processes in graphic design, audio editing, and more.



Enterprise Solutions

Deploy scripts to manage systems and automate business processes.



Security and Monitoring

Implement scripts to enhance security measures and monitor system activities.