



## Automated-Messaging-with-Computers

- ✱ Windows Operating System has a dominant scripting environment called WSH (Windows Scripting Host) with support for JScript and VBScript. Other languages can as well be used in WSH, but the language installer needs to be downloaded and configured.
- ✱ The script files can be created with normal text editor such as notepad and saved with .vbs or .js extension. Double clicking the file invokes the process file, that is **cscript.exe** or **wscript.exe**. The process file name depends on the system settings. The **cscript.exe** outputs data to console (with **WScript.Echo**). The process **wscript.exe** will produce output as **message dialog**.

### Benefits of WSH:

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1. Compilation is [not required for the script code](#).
2. Hence apt solution for [trivial daily tasks with](#) small functionalities.
3. The script file can be created and edited with [simple text editor](#) and hence distributed easily.
4. The scripts are independent of operating [system version such as 32 bit or 64 bit](#).





- ✱ The following runs the **notepad.exe** and bring the notepad to the front. The second parameter 9 means: to active and display the window. If the window is **minimized or maximized, the system restores** it to its original size and position.

```
Set WshShell = WScript.CreateObject("WScript.Shell")  
  
WshShell.Run "notepad", 9  
  
' Give Notepad time to load  
WScript.Sleep 500  
  
Dim Msg: Msg = "WikiTechy Hacking step by step tutorial"  
  
' Type in One Character at a time  
For i = 1 To Len(Msg)  
    WScript.Sleep 200  
    WshShell.SendKeys Mid(Msg, i, 1)  
Next
```





```
-robot
er ▾ New Volume (E:) ▾ wikitechy ▾ Tips-and-tricks ▾ 3.automate-compute-robot

Print New folder

Name ^ Date modified Type Size
3.automate-compute-robot 5/22/2016 12:16 AM Microsoft Word Do... 14 KB
WikiTechy-computer-robot 5/22/2016 12:17 AM VBScript Script File 1 KB

WikiTechy-computer-robot - Notepad
File Edit Format View Help
Set WshShell = WScript.CreateObject("WScript.Shell")
WshShell.Run "notepad", 9

' Give Notepad time to load
WScript.Sleep 500

Dim Msg: Msg = "WikiTechy Hacking step by step tutorial"

' Type in One Character at a time
For i = 1 To Len(Msg)
    WScript.Sleep 200
    WshShell.SendKeys Mid(Msg, i, 1)
Next
```

- 1 Open a notepad and enter the code and save the file as WikiTechy-computer-robot.vbs.
- 2 The code `Set WshShell = WScript.CreateObject("WScript.Shell")` creates an instance for **WScript.Shell** object (COM Automation Process).
- 3 `WshShell.Run "notepad", 9` starts the **notepad.exe** in your machine and brings it to the front in the monitor. Parameter value 9 means that the process is activated and displayed, even if it is minimized or maximized state.





4 `WScript.Sleep 500` makes the process to sleep for 500 milliseconds.

5 `Dim Msg: Msg = "WikiTechy Hacking step by step tutorial"` declares the variable `Msg` with the value "WikiTechy Hacking step by step tutorial".

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```
For i = 1 To Len(Msg)
    WScript.Sleep 200
    WshShell.SendKeys Mid(Msg, i, 1)
Next
```

✿ This for loop will work from loop values between 1 to length of the message, as indicated by the line `For i = 1 To Len(Msg)`.

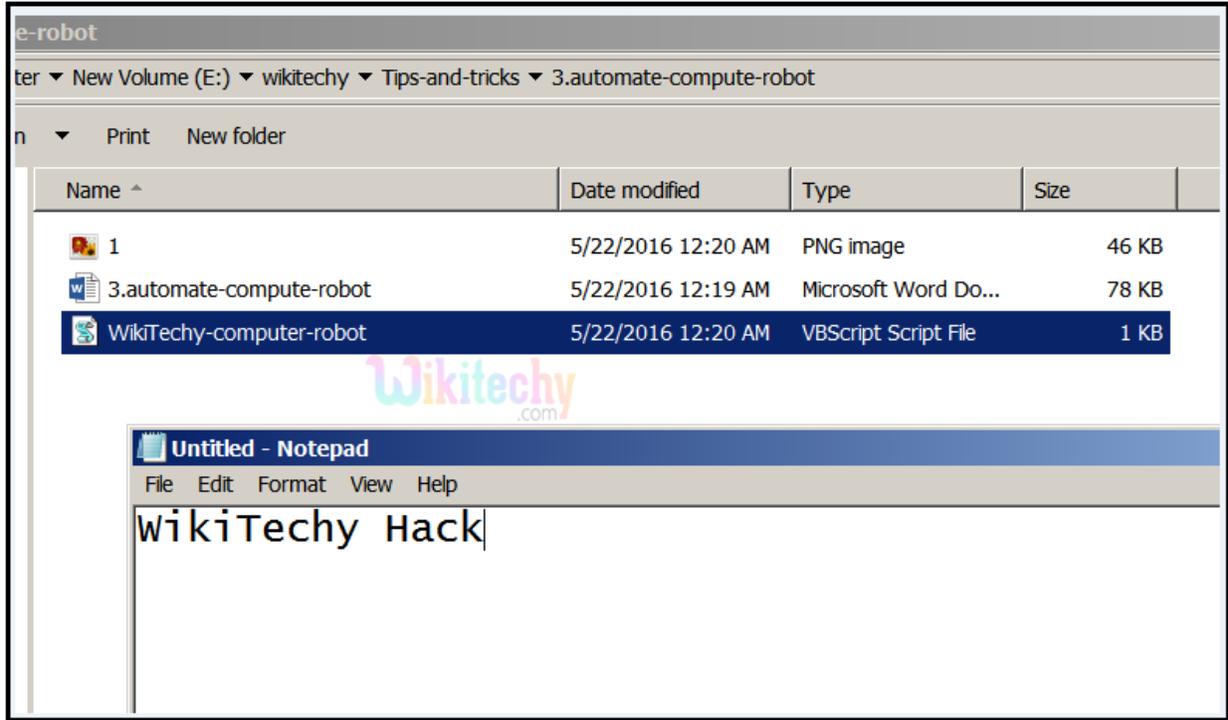
✿ The process is made to be inactive for 200 milliseconds by the code `WScript.sleep 200`.

✿ The `SendKeys` sends the message (`Msg`) to the active window. Here the mid statement has the following syntax:

**Mid**(*stringvar*, *start* [, *length*])

✿ Hence the line code `WshShell.SendKeys Mid(Msg, i, 1)`, will send the character from the `Msg`, from the position indicated by the variable `i`, and of length 1. That is one character is chosen from the input string and sent to the active window.





- ✱ A new notepad is **opened and message is typed character wise** by the shell command as indicated in the figure above and below.

