**Python: As a scripting language**

**Subject - Unix Operating System**

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**Assignment No – 10(e)**

**Title-** Write a shell script that will take a filename as input and check if it is executable. 2. Modify the script in the previous question, to remove the execute permissions, if the file is executable.

**Objective:**

1. To learn about python as scripting option.

**Theory:**

Shell scripting is a powerful way to automate tasks in a Unix-based system. The execution permissions of a file determine whether it can be run as a program. These permissions can be checked and modified using shell commands.

1. **Checking if a file is executable:**

* The -x option in the test command (or [] brackets) is used to check if a file has execute permissions.
* Example: [-x filename] will return true if the file is executable.

1. **Modifying permissions:**

* The chmod command is used to change file permissions.
* To remove execute permissions, chmod -x filename is used.

By combining these concepts, we can create a shell script that takes a filename as input, checks if it is executable, and removes the execute permission if needed.

**Program:**

#!/bin/bash

# Ask for filename input

read -p "Enter the filename: " filename

# Check if the file is executable

if [ -x "$filename" ]; then

  echo "The file '$filename' is executable."

  # Remove execute permission

  chmod -x "$filename"

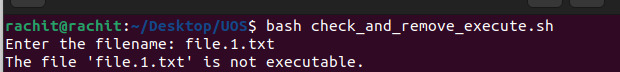
  echo "Execute permission has been removed from '$filename'."

else

  echo "The file '$filename' is not executable."

fi

**Output:**

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**Conclusion:**

This script demonstrates the use of shell scripting to check and modify file permissions. By checking the executability of a file and removing execute permissions when necessary, we ensure better control over file execution. This technique is useful in security and system administration to prevent unintended execution of files.