Bahria University,

Karachi Campus

A picture containing text, room

Description automatically generated

LAB EXPERIMENT NO.

**03**

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| **01** | Perform all the commands provided in the lab manual |
| **02** | Create an empty file with a .txt extension. Write a shell script that would write the current date, student’s name, and registration number into that file, while using variables for all three entries |
| **03** | Create a .txt file and input ten lines of entry while mixing it with both alphanumeric characters. Sort the contents of the created file in an ascending order and write the sorted output into another file. |
| **04** | Write C language programs that would generate the following for a given number , e.g. : Calculate the factorial of . |
| 05 | write a Program to Sum of Natural Numbers Using for Loop |

Submitted On:

04-April-2022

**Task No. 1: Perform all the commands provided in the lab manual**

**Solution:**

**Find Command:**

Text

Description automatically generated

**Grep Command:**

Text

Description automatically generated

**Sort Command:**

A picture containing rectangle

Description automatically generated

Text

Description automatically generated

Shape, rectangle

Description automatically generated with medium confidence

**Task No. 2: Create an empty file with a .txt extension. Write a shell script that would write the current date, student’s name, and registration number into that file, while using variables for all three entries**

**Solution:**

Text

Description automatically generated

Graphical user interface, text, application, Teams

Description automatically generated

Rectangle

Description automatically generated

**Task No. 3: Create a .txt file and input ten lines of entry while mixing it with both alphanumeric characters. Sort the contents of the created file in an ascending order and write the sorted output into another file.**

**Solution:**

Graphical user interface, text, application

Description automatically generated

Graphical user interface, application

Description automatically generated

Text

Description automatically generated

**Task No. 4: Write C language programs that would generate the following for a given number , e.g. : Calculate the factorial of .**

**Solution:**

Graphical user interface, text, application

Description automatically generated

**Output:**

Text

Description automatically generated

**Task No. 5: Write a Program to Sum of Natural Numbers Using for Loop**

**Solution:**

Graphical user interface, text, application

Description automatically generated

**Output:**

Text

Description automatically generated

Bahria University,

Karachi Campus

A picture containing text, room

Description automatically generated

LAB EXPERIMENT NO.

**04**

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| **01** | **Write a shell script to count all files and folders present in directory and stored the output into a text file and display its content on the terminal** |
| **02** | **Write a single shell script that creates four different files, while taking the names of all created files as input from the user. As the files content, insert your name in the first file, registration number in the second and section details in the third. These should be followed by merging the contents of all three files into the fourth one.** |
| **03** | **Write a shell script that either performs a file sort, file search or directory listing operation based on the user’s selection of the operation he/she would like to execute.** |
| 04 | Write a C program that takes values of two matrices of size (𝑚×1) and (1×𝑛) as input from the user. Multiply the above two matrixes and store the resulting (𝑚×𝑛) matrix in a 2D array. Display the contents of the first and second matrices and also the resulting matrix. Achieve alignment in the displayed content as much possible. |

Submitted On:

4-April-2022

**Task No. 1: Write a shell script to count all files and folders present in directory and stored the output into a text file and display its content on the terminal.**

**Solution & Output:**

Graphical user interface, text, application

Description automatically generated

**Task No. 2: Write a single shell script that creates four different files, while taking the names of all created files as input from the user. As the files content, insert your name in the first file, registration number in the second and section details in the third. These should be followed by merging the contents of all three files into the fourth one.**

**Solution:**

**Graphical user interface, text, application

Description automatically generated**

Text

Description automatically generated**Output:**

**Task No. 3: Write a shell script that either performs a file sort, file search or directory listing operation based on the user’s selection of the operation he/she would like to execute.**

**Solution:**

**Graphical user interface, text

Description automatically generated**

**Text

Description automatically generatedOutput:**

**Task No. 4: Write a C program that takes values of two matrices of size (𝑚×1) and (1×𝑛) as input from the user. Multiply the above two matrixes and store the resulting (𝑚×𝑛) matrix in a 2D array. Display the contents of the first and second matrices and the resulting matrix. Achieve alignment in the displayed content as much possible.**

**Solution:**

Text

Description automatically generated

Text

Description automatically generated**Output:**