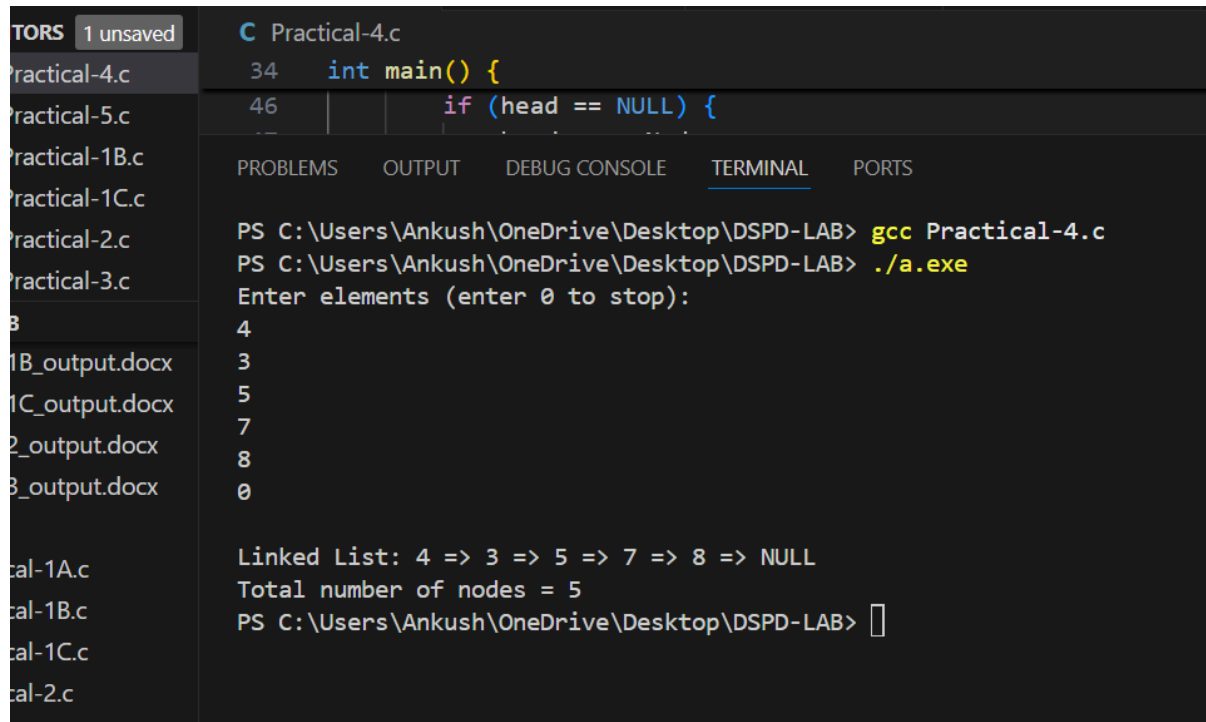


DATA STRUCTURE AND PROGRAM DESIGN LAB – 04

4. This C program creates a linked list to store integer elements. It prompts the user to enter elements and add them to the list until the user enters 0. It then traverses the list and prints each element and "=>" until reaching the null pointer. Finally, it displays the number of nodes in the list.

SAMPLE OUTPUT:



The screenshot shows a code editor with a file explorer on the left and a terminal window on the right. The file explorer lists several files, including 'TORS 1 unsaved', 'Practical-4.c', 'Practical-5.c', 'Practical-1B.c', 'Practical-1C.c', 'Practical-2.c', 'Practical-3.c', 'B', '1B_output.docx', '1C_output.docx', '2_output.docx', '3_output.docx', 'cal-1A.c', 'cal-1B.c', 'cal-1C.c', and 'cal-2.c'. The code editor displays the C program 'Practical-4.c' with the following code:

```
34 int main() {
46     if (head == NULL) {
```

The terminal window shows the output of the program. It starts with the command prompt 'PS C:\Users\Ankush\OneDrive\Desktop\DSPD-LAB>' followed by the command 'gcc Practical-4.c'. The next command is './a.exe'. The program prompts 'Enter elements (enter 0 to stop):' and the user enters the numbers 4, 3, 5, 7, 8, and 0. The program then outputs 'Linked List: 4 => 3 => 5 => 7 => 8 => NULL' and 'Total number of nodes = 5'. The terminal ends with the command prompt 'PS C:\Users\Ankush\OneDrive\Desktop\DSPD-LAB>'.