C / C++ Programming

Lab # 01
Introduction to C & Debugger tools

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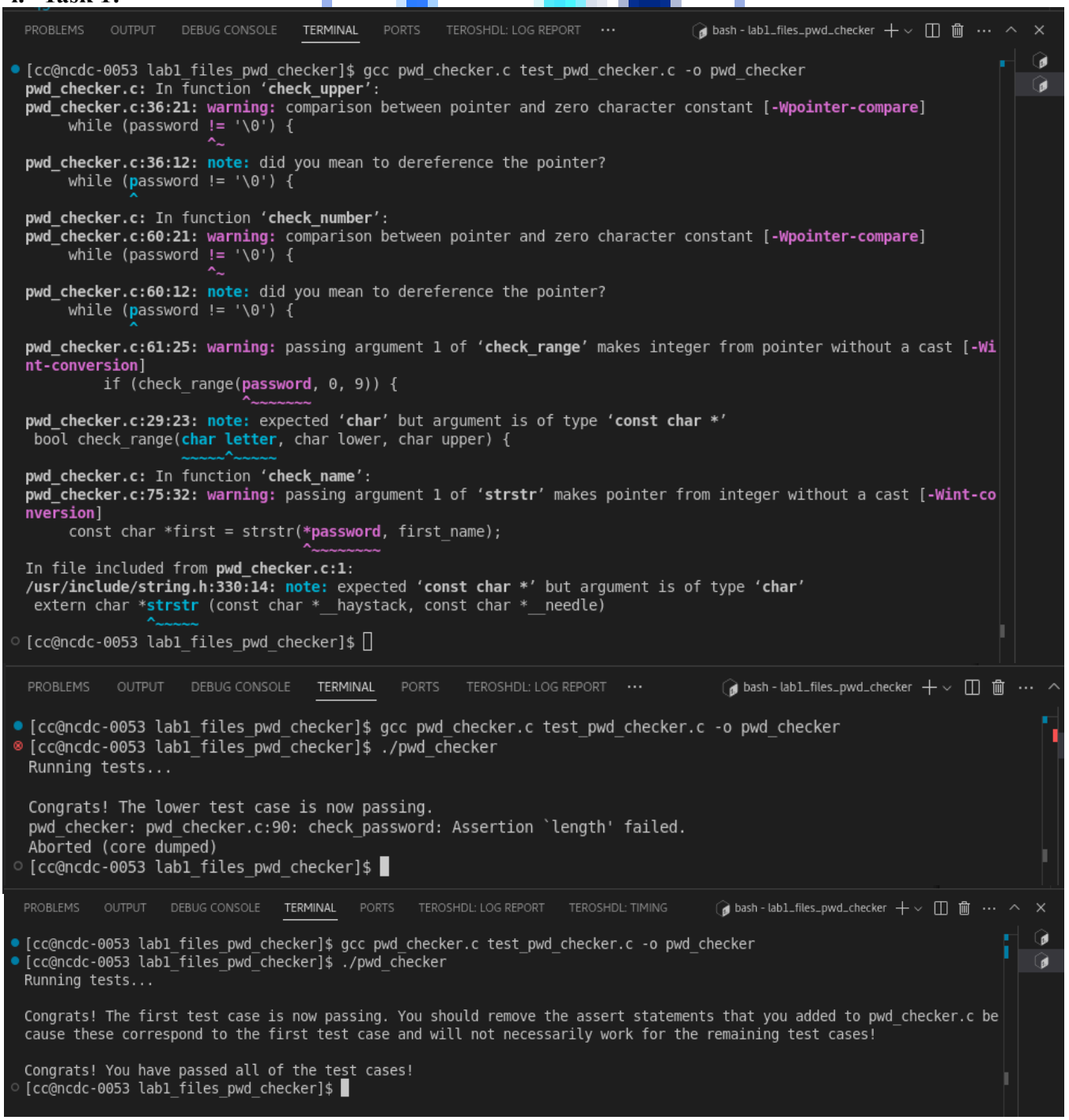
Date	*9th July 2025*

1. In-Lab Tasks: (*Write your lab task & screenshots here*)

i. Task 1:

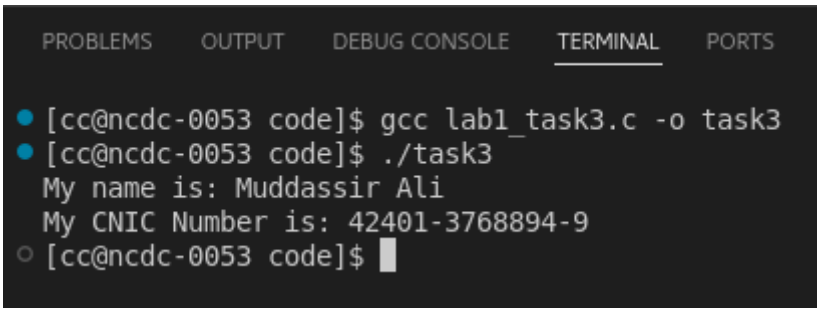


ii. Task 2:

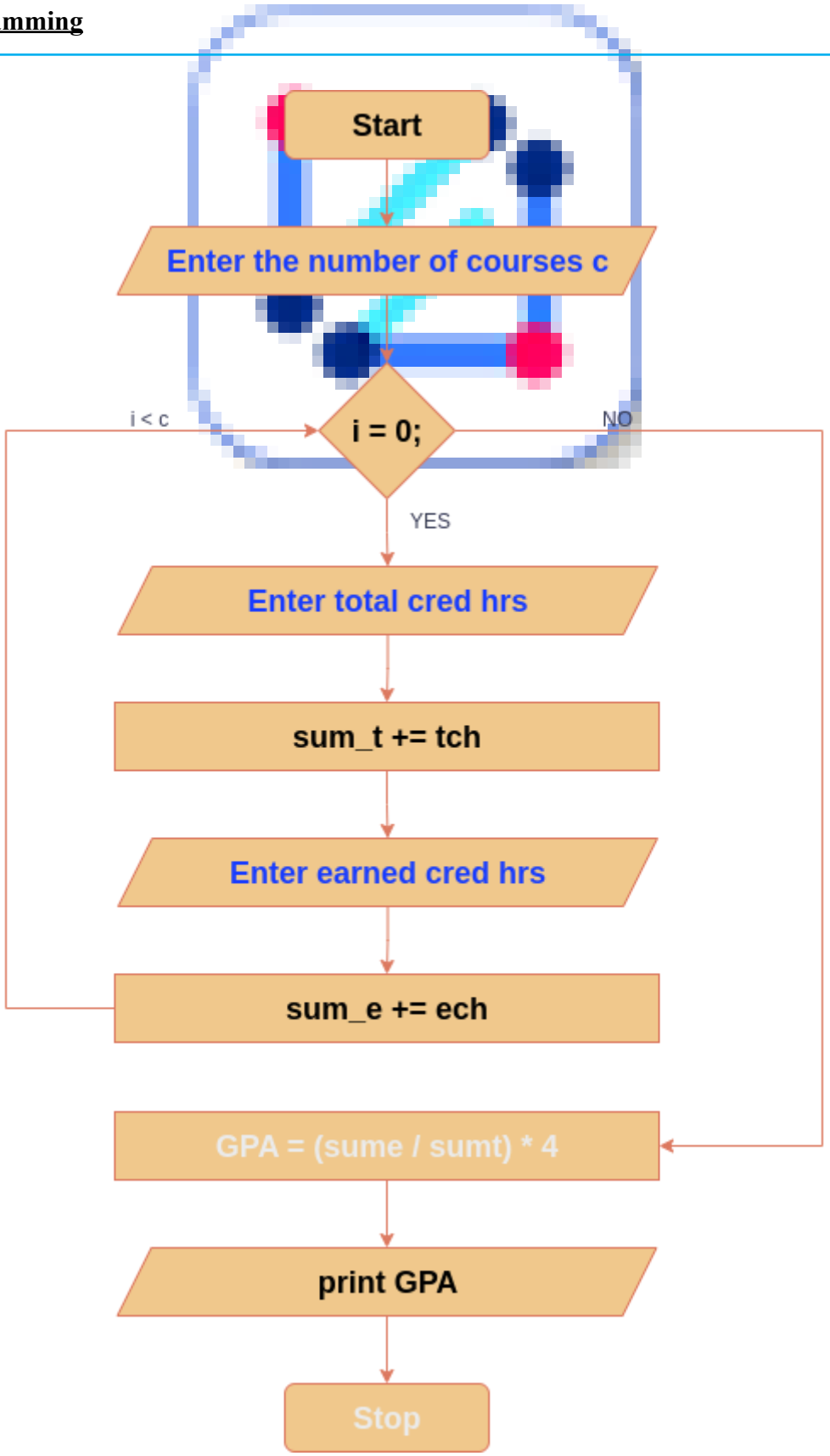
S.No	Data Type
1	float
2	float

3	int
4	string
5	float
6	string
7	float
8	int
9	float
10	float
11	float

iii. Task 3:



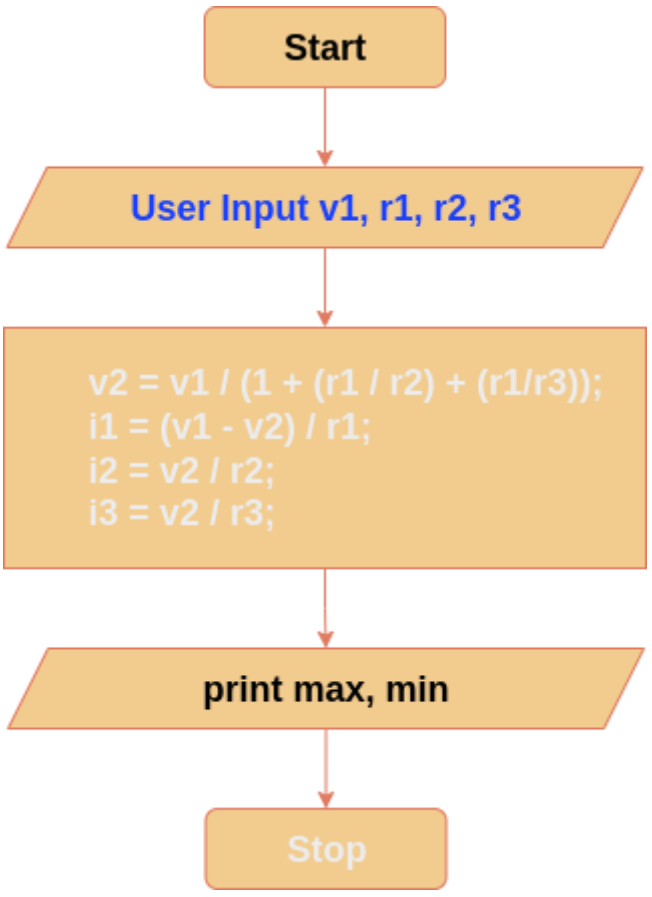
iv. Task 4:


Start
Enter the number of courses c
i < c
i = 0;
NO
YES
Enter total cred hrs
sum_t += tch
Enter earned cred hrs
sum_e += ech
GPA = (sume / sumt) * 4
print GPA
Stop

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  TEROSHDL:

[cc@ncdc-0053 code]$ gcc lab1_task4.c -o task4
[cc@ncdc-0053 code]$ ./task4
Enter the number of Courses:
2
Enter the credit hours of Course # 1
4
How much credit hours you earned in the Course # 1
3.7
Enter the credit hours of Course # 2
4
How much credit hours you earned in the Course # 2
3.5
Your GPA is 3.600000
[cc@ncdc-0053 code]$
```

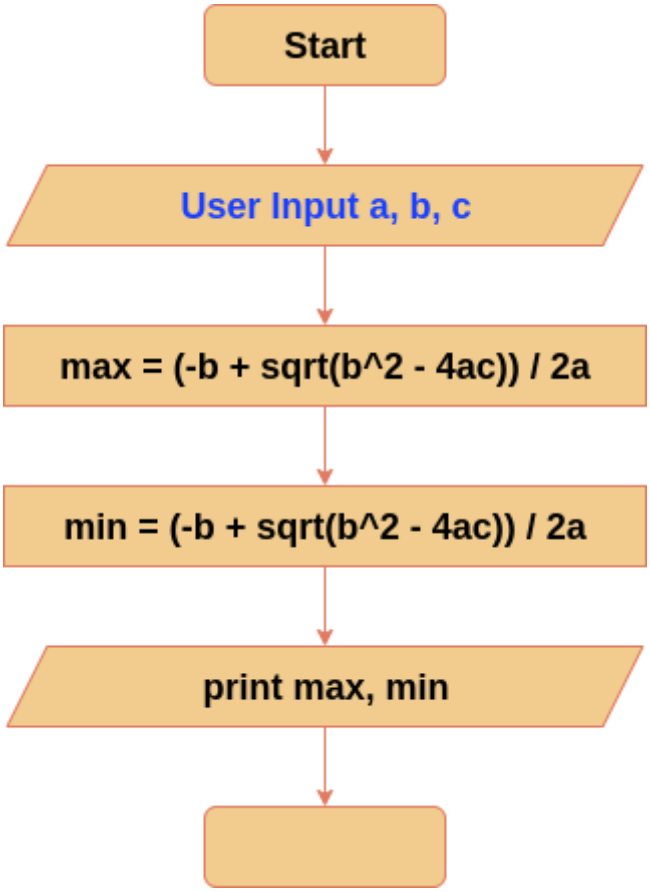
v. **Task 5:**

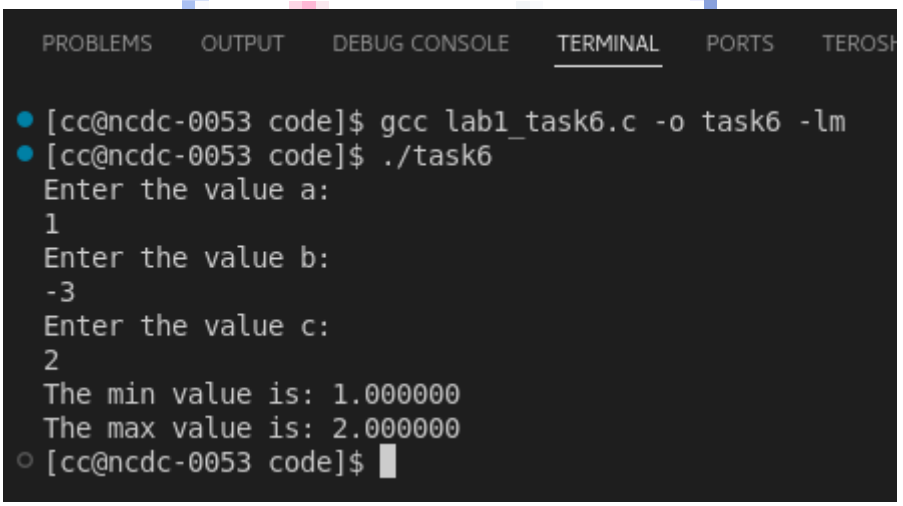


```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  T

[cc@ncdc-0053 code]$ gcc lab1_task5.c -o task5
[cc@ncdc-0053 code]$ ./task5
Enter the Voltage V1:
12
Enter the current i1:
4
Enter the current i2:
6
Enter the current i3:
3
The Nodal Voltage are: 4.000000
The current i1 is: 2.000000
The current i1 is: 0.666667
The current i1 is: 1.333333
[cc@ncdc-0053 code]$
```

vi. **Task 6:**





2. Critical Analysis: (*Write you critical analysis / conclusion here*)

In the first task we learned how to debug the code and also learned the command to compile and run the code from the terminal. We also get knowledge of data types, user-defined input. We also make flowcharts so that before code we have a skeleton or plan to execute.