



## Digital Design Verification

### Assignment # 02

#### Basic Concepts in C++ Std vector & This pointer

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## TASK # 01:

### Terminal output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
• khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/C++/Assignment#02$ g++ task1.cpp -o task1
• ^[[khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/C++/Assignment#02$ ./task1

Student Record Management System
1. Add Student
2. Display All Students
3. Search Student by Roll Number
4. Update Marks
5. Sort Students by Average Marks
6. Exit
Enter your choice: 1
Enter student name: Khalil Rehman
Enter roll number: 1234
Enter number of subjects: 3
Enter marks for subject 1: 89
Enter marks for subject 2: 90
Enter marks for subject 3: 78
Student added successfully.

Student Record Management System
1. Add Student
2. Display All Students
3. Search Student by Roll Number
4. Update Marks
5. Sort Students by Average Marks
6. Exit
Enter your choice: 1
Enter student name: Ali
Enter roll number: 4321
Enter number of subjects: 2
Enter marks for subject 1: 99
Enter marks for subject 2: 98
Student added successfully.

Student Record Management System
1. Add Student
2. Display All Students
3. Search Student by Roll Number
4. Update Marks
5. Sort Students by Average Marks
6. Exit
Enter your choice: 2

--- Student 1 ---
Name: Khalil Rehman
Roll Number: 1234
Marks: 89 90 78
Average Marks: 85.6667

--- Student 2 ---
Name: Ali
Roll Number: 4321
Marks: 99 98
Average Marks: 98.5
Manage - New Code update available.
Student Record Management System
```



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

Student Record Management System
1. Add Student
2. Display All Students
3. Search Student by Roll Number
4. Update Marks
5. Sort Students by Average Marks
6. Exit
Enter your choice: 3
Enter roll number to search: 4321

Student found:
Name: Ali
Roll Number: 4321
Marks: 99 98
Average Marks: 98.5

Student Record Management System
1. Add Student
2. Display All Students
3. Search Student by Roll Number
4. Update Marks
5. Sort Students by Average Marks
6. Exit
Enter your choice: 4
Enter roll number to update marks: 1234
Enter new marks:
Enter student name: khalil rehman
Enter roll number: 1234
Enter number of subjects: 2
Enter marks for subject 1: 100
Enter marks for subject 2: 90
Student marks updated.

Student Record Management System
1. Add Student
2. Display All Students
3. Search Student by Roll Number
4. Update Marks
5. Sort Students by Average Marks
6. Exit
Enter your choice: 5
Students sorted by average marks.

Student Record Management System
1. Add Student
2. Display All Students
3. Search Student by Roll Number
4. Update Marks
5. Sort Students by Average Marks
6. Exit
Accounts your choice: 2

--- Student 1 ---
Name: Ali
Roll Number: 4321
```



```
Student Record Management System
1. Add Student
2. Display All Students
3. Search Student by Roll Number
4. Update Marks
5. Sort Students by Average Marks
6. Exit
Enter your choice: 2

--- Student 1 ---
Name: Ali
Roll Number: 4321
Marks: 99 98
Average Marks: 98.5

--- Student 2 ---
Name: khalil rehman
Roll Number: 1234
Marks: 100 90
Average Marks: 95

Student Record Management System
1. Add Student
2. Display All Students
3. Search Student by Roll Number
4. Update Marks
5. Sort Students by Average Marks
6. Exit
Enter your choice: 6
Exiting program.
○ khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/C++/Assignment
```



## TASK # 02:

### TERMINAL OUTPUT:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

• khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/C++/Assignment#02$ g++ task2.cpp -o task2
• khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/C++/Assignment#02$ ./task2
Enter account holder name: khalil rehman
Enter initial balance: 5000
Depositing $500...
Withdrawing $300...

Account Holder: khalil rehman
Current Balance: $5200
○ khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/C++/Assignment#02$
```