```
PS C:\Users\ADMIN\Desktop\DSPD practical> cd "c:\Users\ADMIN\Desktop\DSPD practical\" ; if ($?) { gcc LAB1A.c -o LAB1A } ; if ($?) { .\LAB1A
 }
Enter number of elements: 4
Enter 4 numbers:
12
13
14
15
Sum of numbers at odd positions: 26
Sum of numbers at even positions: 28
PS C:\Users\ADMIN\Desktop\DSPD practical>
```

```
PS C:\Users\ADMIN\Desktop\DSPD practical> cd "c:\Users\ADMIN\Desktop\DSPD practical\" ; if ($?) { gcc LAB1B.c -o LAB1B } ; if ($?) { .\LAB1B
 }
7
Found 7
PS C:\Users\ADMIN\Desktop\DSPD practical>
```

```
PS C:\Users\ADMIN\Desktop\DSPD practical> cd "c:\Users\ADMIN\Desktop\DSPD practical\" ; if ($?) { gcc LAB1C.c -o LAB1C } ; if ($?) { .\LAB1C
 }
Enter number of students: 2

Enter details for student 1
ID: 2324
Name: sahil
Age: 20
Average Marks: 92

Enter details for student 2
ID: 2738
Name: raju
Age: 20
Average Marks: 90

Students sorted in descending order by Average Marks:
ID: 2324 | Name: sahil | Age: 20 | Avg Marks: 92.00
ID: 2738 | Name: raju | Age: 20 | Avg Marks: 90.00
PS C:\Users\ADMIN\Desktop\DSPD practical>
```

```
PS C:\Users\ADMIN\Desktop\DSPD practical> cd "c:\Users\ADMIN\Desktop\DSPD practical\" ; if ($?) { gcc LAB2.c -o LAB2 } ; if ($?) { .\LAB2 }

---- Stack Menu ----
1. Push an Element
2. Pop an Element
3. Check Palindrome using Stack
4. Demonstrate Overflow/Underflow
5. Display Stack
6. Exit
Enter your choice: 1
Enter value to push: 10
10 pushed onto stack

---- Stack Menu ----
1. Push an Element
2. Pop an Element
3. Check Palindrome using Stack
4. Demonstrate Overflow/Underflow
5. Display Stack
6. Exit
Enter your choice: 1
Enter value to push: 20
20 pushed onto stack

---- Stack Menu ----
1. Push an Element
2. Pop an Element
3. Check Palindrome using Stack
4. Demonstrate Overflow/Underflow
5. Display Stack
6. Exit
Enter your choice: 5
Stack elements: 20 10

---- Stack Menu ----
1. Push an Element
```


---- Stack Menu ----
1. Push an Element
2. Pop an Element
3. Check Palindrome using Stack
4. Demonstrate Overflow/Underflow
5. Display Stack
6. Exit
Enter your choice: 5
Stack elements: 20 10
---- Stack Menu ----
1. Push an Element
2. Pop an Element
3. Check Palindrome using Stack
4. Demonstrate Overflow/Underflow
5. Display Stack
6. Exit
Enter your choice: 6
Exiting program.
PS C:\Users\ADMIN\Desktop\DSPD practical>
Activate Windows
Go to Settings to activate Wir

```
PS C:\Users\ADMIN\Desktop\DSPD practical> cd "c:\Users\ADMIN\Desktop\DSPD practical\" ; if ($?) { gcc LAB3.c -o LAB3 } ; if ($?) { .\LAB3 }

---- Queue Menu ----
1. Insert an Element
2. Delete an Element
3. Demonstrate Overflow
4. Demonstrate Underflow
5. Display Queue
6. Exit
Enter your choice: 1
Enter character to insert: 1
Inserted '1' into the queue

---- Queue Menu ----
1. Insert an Element
2. Delete an Element
3. Demonstrate Overflow
4. Demonstrate Underflow
5. Display Queue
6. Exit
Enter your choice: 1
Enter character to insert: 2
Inserted '2' into the queue

---- Queue Menu ----
1. Insert an Element
2. Delete an Element
3. Demonstrate Overflow
4. Demonstrate Underflow
5. Display Queue
6. Exit
Enter your choice: 5
Queue elements: 1 2
```

```
PS C:\Users\ADMIN\Desktop\DSPD practical> cd "c:\Users\ADMIN\Desktop\DSPD practical\" ; if ($?) { gcc LAB4.c -o LAB4 } ; if ($?) { .\LAB4 }
Enter integers to add to the linked list (enter 0 to stop):
12
13
14
15
16

0

Linked List Elements:
12 => 13 => 14 => 15 => 16 => NULL
Number of nodes in the list: 5
PS C:\Users\ADMIN\Desktop\DSPD practical>
```

```
PS C:\Users\ADMIN\Desktop\DSPD practical> cd "c:\Users\ADMIN\Desktop\DSPD practical\" ; if ($?) { gcc LAB5.c -o LAB5 } ; if ($?) { .\LAB5 }
Enter number of nodes: 2
Enter value 1: 12
Enter value 2: 13
Inorder Traversal: 12 13
Preorder Traversal: 12 13
Postorder Traversal: 13 12
Enter element to search:
```

```
PS C:\Users\ADMIN\Desktop\DSPD practical> cd "c:\Users\ADMIN\Desktop\DSPD practical\" ; if ($?) { gcc LAB6.c -o LAB6 } ; if ($?) { .\LAB6 }

1. Search Element
2. Insert Element
3. Delete Leaf Element
4. Exit
Enter choice: 2
Enter value to insert: 28
Inorder Traversal: 28

1. Search Element
2. Insert Element
3. Delete Leaf Element
4. Exit
Enter choice: 1
Enter value to search: 28
Found

1. Search Element
2. Insert Element
3. Delete Leaf Element
4. Exit
Enter choice:
```

```
PS C:\Users\ADMIN\Desktop\DSPD practical> cd "c:\Users\ADMIN\Desktop\DSPD practical\" ; if ($?) { gcc LAB7.c -o LAB7 } ; if ($?) { .\LAB7 }
BFS Order: 1 4 2 7 5 3 8 6 9
DFS Order: 1 4 7 8 5 2 3 6 9
PS C:\Users\ADMIN\Desktop\DSPD practical>
```

```
PS C:\Users\ADMIN\Desktop\DSPD practical> cd "c:\Users\ADMIN\Desktop\DSPD practical\" ; if ($?) { gcc LAB9.c -o LAB9 } ; if ($?) { .\LAB9 }
Enter number of keys: 2
Enter the keys:
10
28
Final hash table:
Slot 0: 28
Slot 1: -1
Slot 2: -1
Slot 3: 10
Slot 4: -1
Slot 5: -1
Slot 6: -1
PS C:\Users\ADMIN\Desktop\DSPD practical>
```

```
PS C:\Users\ADMIN\Desktop\DSPD practical> cd "c:\Users\ADMIN\Desktop\DSPD practical\" ; if ($?) { gcc LAB10.c -o LAB10 } ; if ($?) { .\LAB10
 }
Enter source file name: input.txt
Enter destination file name: output.txt
Cannot open source file.
PS C:\Users\ADMIN\Desktop\DSPD practical>
```