

 "C:\Users\OM\Desktop\2nd Sem\DS Lab Programs\Activity 3\Activity 4.exe"

Enter the postfix expression: 2 3 1 * + 9 -

Expression value is -4.00

Select "C:\Users\OM\Desktop\Activity 4b.exe"

Enter the prefix string in figures(1 digit nos):+2*35

Final ans = 17

Enter the infix expression to evaluate: $2*(4+3)/2$

7

Process returned 0 (0x0) execution time : 28.645 s

Press any key to continue.

Enter the expression : a+b*c

a b c * +

Process returned 0 (0x0) execution time : 29.642 s

Press any key to continue.

Enter infix operation: A*B+C*D

+*AB*CD

Process returned 0 (0x0) execution time : 26.327 s

Press any key to continue.

Give an Expression = $+*AB*CD$

Given Prefix Expression : $+*AB*CD$

Infix Expression: $((A*B)+(C*D))$

Enter the Postfix Expression : : AB*CD*+

The Infix Expression is : : A*B+C*D

Process returned 0 (0x0) execution time : 24.3

Press any key to continue.

1. Enqueue

2. Dequeue

3. Display all elements of queue

4. Quit

Enter your choice : 1

Inset the element in queue : 5

1. Enqueue

2. Dequeue

3. Display all elements of queue

4. Quit

Enter your choice : 2

Element deleted from queue is : 5

1. Enqueue

2. Dequeue

3. Display all elements of queue

4. Quit

Enter your choice : 4

Enter your choice?

3

Enter element value1

Enter the location after which you want to insert 1

Node Inserted

*****Main Menu*****

Choose one option from the following list ...

=====

- 1.Insert in begining
- 2.Insert at last
- 3.Insert at any random location
- 4.Delete from Beginning
- 5.Delete from last
- 6.Delete node after specified location
- 7.Search for an element
- 8.Show
- 9.Exit

Enter your choice?

8

printing values

1

2

1

Enter your choice?

4

Node deleted from the begining ...

*****Main Menu*****

Choose one option from the following list ...

=====

- 1.Insert in begining
- 2.Insert at last
- 3.Insert at any random location
- 4.Delete from Beginning
- 5.Delete from last
- 6.Delete node after specified location
- 7.Search for an element
- 8.Show
- 9.Exit

Enter your choice?

8

Nothing to print

*****Main Menu*****

Choose one option from the following list ...

=====

- 1.Insert in begining
- 2.Insert at last
- 3.Insert at any random location
- 4.Delete from Beginning
- 5.Delete from last
- 6.Delete node after specified location
- 7.Search for an element
- 8.Show
- 9.Exit

Enter your choice?

9

Enter your choice?

7

Enter item which you want to search?

2

Item found at location 2 Item not found

*****Main Menu*****

Choose one option from the following list ...

=====

- 1.Insert in beginning
- 2.Insert at last
- 3.Insert at any random location
- 4.Delete from Beginning
- 5.Delete from last
- 6.Delete node after specified location
- 7.Search for an element
- 8.Show
- 9.Exit

Enter your choice?

6

Enter the location of the node after which you want

2

Deleted node 3

*****Main Menu*****

Choose one option from the following list ...

=====

- 1.Insert in beginning
- 2.Insert at last
- 3.Insert at any random location
- 4.Delete from Beginning
- 5.Delete from last
- 6.Delete node after specified location
- 7.Search for an element
- 8.Show
- 9.Exit

Enter your choice?

4

node deleted

*****Main Menu*****

Choose one option from the following list ...

-
- 1.Insert in beginning
 - 2.Insert at last
 - 3.Insert at any random location
 - 4.Delete from Beginning
 - 5.Delete from Last
 - 6.Delete the node after the given data
 - 7.Search
 - 8.Show
 - 9.Exit

Enter your choice?

5

node deleted

Enter your choice?

7

Enter item which you want to search?

4

item found at location 3

*****Main Menu*****

Choose one option from the following list ...

=====

1.Insert in begining

2.Insert at last

3.Insert at any random location

4.Delete from Beginning

5.Delete from last

6.Delete the node after the given data

7.Search

8.Show

9.Exit

Enter your choice?

6

Enter the data after which the node is to be deleted : 2

node deleted

Enter your choice?

5

Deleted Node from the last ...

*****Main Menu*****

Choose one option from the following list ...

=====

- 1.Insert in begining
- 2.Insert at last
- 3.Insert at any random location
- 4.Delete from Beginning
- 5.Delete from last
- 6.Delete node after specified location
- 7.Search for an element
- 8.Show
- 9.Exit

Enter your choice?

4

Node deleted from the begining ...

*****Main Menu*****

Choose one option from the following list ...

=====

- 1.Insert in begining
- 2.Insert at last
- 3.Insert at any random location
- 4.Delete from Beginning
- 5.Delete from last
- 6.Delete node after specified location
- 7.Search for an element
- 8.Show
- 9.Exit

Enter your choice?

8

Nothing to print

Enter your choice?

2

Enter value1

node inserted

*****Main Menu*****

Choose one option from the following list ...

=====

1.Insert in begining

2.Insert at last

3.Insert at any random location

4.Delete from Beginning

5.Delete from last

6.Delete the node after the given data

7.Search

8.Show

9.Exit

Enter your choice?

3

Enter the location1

Enter value4

node inserted

*****Main Menu*****

Choose one option from the following list ...

=====

- 1.Insert in beginning
- 2.Insert at last
- 3.Insert at any random location
- 4.Delete from Beginning
- 5.Delete from last
- 6.Delete the node after the given data
- 7.Search
- 8.Show
- 9.Exit

Enter your choice?

1

Enter Item value2

Node Inserted

Enter your choice?

8

printing values...

2

1

4

1

*****Main Menu*****

Choose one option from the following list ...

=====

1.Insert in begining

2.Insert at last

3.Insert at any random location

4.Delete from Beginning

5.Delete from last

6.Delete the node after the given data

7.Search

8.Show

9.Exit

Enter your choice?

7

Enter item which you want to search?

4

item found at location 3

*****Main Menu*****

Enter your choice: 4

Deleting a node from beginning

.....
Do you want to continue? (Y/N) : y

----- Circular Singly Linked List -----

1. Insert a node at beginning
2. Insert a node at end
3. Insert a node at given position
4. Delete a node from beginning
5. Delete a node from end
6. Delete a node from given position
7. Print list from beginning
8. Print list from end
9. Search a node data
10. Update a node data
11. Exit

Enter your choice: 5

Deleting a node from end

.....
Do you want to continue? (Y/N) : y

Enter your choice: 7

.....

Printing the list from beginning

1 2 5

.....

Do you want to continue? (Y/N) : y

----- Circular Singly Linked List -----

1. Insert a node at beginning
2. Insert a node at end
3. Insert a node at given position
4. Delete a node from beginning
5. Delete a node from end
6. Delete a node from given position
7. Print list from beginning
8. Print list from end
9. Search a node data
10. Update a node data
11. Exit

.....

Enter your choice: 8

.....

Printing the list from end

5 2 1

.....

Do you want to continue? (Y/N) : y

----- Circular Singly Linked List -----

1. Insert a node at beginning
2. Insert a node at end
3. Insert a node at given position
4. Delete a node from beginning
5. Delete a node from end
6. Delete a node from given position
7. Print list from beginning
8. Print list from end
9. Search a node data
10. Update a node data
11. Exit

Enter your choice: 3

Inserting a node at the given position

Enter Data: 1

Enter Position: 1

Do you want to continue? (Y/N) : y

Enter your choice: 6

.....

Delete a node from given position

Enter Position: 2

.....

Do you want to continue? (Y/N) : y

----- Circular Singly Linked List -----

1. Insert a node at beginning
2. Insert a node at end
3. Insert a node at given position
4. Delete a node from beginning
5. Delete a node from end
6. Delete a node from given position
7. Print list from beginning
8. Print list from end
9. Search a node data
10. Update a node data
11. Exit

.....

Enter your choice: 7

.....

Printing the list from beginning

1

.....

Do you want to continue? (Y/N) : y

```
-----  
Enter your choice: 1
```

```
-----  
Inserting a node at beginning
```

```
Enter Data: 2
```

```
-----  
Do you want to continue? (Y/N) : y
```


Enter your choice: 9

.....

Searching the node data

Enter Data: 2

Data Found

.....

Do you want to continue? (Y/N) : y

----- Circular Singly Linked List -----

1. Insert a node at beginning
2. Insert a node at end
3. Insert a node at given position
4. Delete a node from beginning
5. Delete a node from end
6. Delete a node from given position
7. Print list from beginning
8. Print list from end
9. Search a node data
10. Update a node data
11. Exit

.....

Enter your choice: 10

.....

Updating the node data

Enter Data: 2

Enter Position: 1

.....

Do you want to continue? (Y/N) : y

.....
Enter your choice: 7

.....
Printing the list from beginning

1

.....
Do you want to continue? (Y/N) : y

----- Circular Singly Linked List -----

1. Insert a node at beginning
2. Insert a node at end
3. Insert a node at given position
4. Delete a node from beginning
5. Delete a node from end
6. Delete a node from given position
7. Print list from beginning
8. Print list from end
9. Search a node data
10. Update a node data
11. Exit

.....
Enter your choice: 11

.....
Program was terminated

```
nitika@nitika-VirtualBox:~/Desktop/CODES$ touch activity10.c
nitika@nitika-VirtualBox:~/Desktop/CODES$ gcc activity10.c
nitika@nitika-VirtualBox:~/Desktop/CODES$ ./a.out
```

Implementation of Stack using Linked List

1. Push
2. Pop
3. Display
4. Exit

Enter your choice : 1

Enter the value to insert: 12
Node is Inserted

1. Push
2. Pop
3. Display
4. Exit

Enter your choice : 2
Popped element is :12

1. Push
2. Pop
3. Display
4. Exit

Enter your choice : 56

Wrong Choice

1. Push
2. Pop
3. Display
4. Exit

Enter your choice : 3

Stack Underflow

1. Push
2. Pop
3. Display
4. Exit

Enter your choice : 4

```
nitika@nitika-VirtualBox:~/Desktop/CODES$
```