Queue:

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(globals)

Project Classes Debug   stack.c [*] infix to prefix.c queue.c

```c
#include <stdio.h>
#define SIZE 5

int queue[SIZE];
int front = -1, rear = -1;

void insert() {
    int value;
    if (rear == SIZE - 1)
        printf("Queue Overflow\n");
    else {
        printf("Enter value to insert: ");
        scanf("%d", &value);
        if (front == -1) front = 0;
        queue[++rear] = value;
        printf("%d inserted\n", value);
    }
}

void delete() {
    if (front == -1 || front > rear)
        printf("Queue Underflow\n");
    else {
        printf("%d deleted\n", queue[front++]);
        if (front > rear) front = rear = -1;
    }
}

void display() {
    if (front == -1)
        printf("Queue is empty\n");
    else {
        printf("Queue elements: ");
        int i;
        for (i = front; i <= rear; i++)
            printf("%d ", queue[i]);
        printf("\n");
    }
}

int main() {
    int choice;
    while (1) {
        printf("\n1. Insert\n2. Delete\n3. Display\n4. Exit\nEnter choice: ");
        scanf("%d", &choice);
        switch (choice) {
            case 1: insert(); break;
            case 2: delete(); break;
            case 3: display(); break;
            case 4: return 0;
            default: printf("Invalid choice\n");
        }
    }
}
```

Output :

```
3. Display
4. Exit
Enter choice: 1
Enter value to insert: 12
12 inserted

1. Insert
2. Delete
3. Display
4. Exit
Enter choice: 1
Enter value to insert: 23
23 inserted

1. Insert
2. Delete
3. Display
4. Exit
Enter choice: 2
12 deleted

1. Insert
2. Delete
3. Display
4. Exit
Enter choice: 3
Queue elements: 23
```