

```

#include <stdio.h>
#define MAX 100

int stack1[MAX], stack2[MAX];
int top1 = -1, top2 = -1;

void insert(int value) {
    if (top1 == MAX - 1) {
        printf("Queue is full\n");
    } else {
        stack1[++top1] = value;
        printf("Value inserted is %d\n", value);
    }
}

int delete() {
    if (top1 == -1 && top2 == -1) {
        printf("Queue is empty\n");
        return -1;
    }

    if (top2 == -1) {
        while (top1 != -1) {
            stack2[++top2] = stack1[top1--];
        }
    }

    int value = stack2[top2--];
    printf("Deleted element is %d\n", value);
    return value;
}

```

```
]void display() {  
-   if (top1 == -1 && top2 == -1) {  
-       printf("Queue is empty\n");  
-       return;  
-   }  
  
-   printf("Queue elements: ");  
  
-   for (int i = top2; i >= 0; i--) {  
-       printf("%d ", stack2[i]);  
-   }  
  
-   for (int i = 0; i <= top1; i++) {  
-       printf("%d ", stack1[i]);  
-   }  
  
-   printf("\n");  
- }
```

```

int main() {
    int choice;
    int value;

    while (1) {
        printf("\nQueue using Stacks Menu:\n");
        printf("1. Insert\n");
        printf("2. Delete\n");
        printf("3. Display\n");
        printf("4. Exit\n");
        printf("Enter your choice:\n ");
        scanf("%d", &choice);

        switch (choice) {
            case 1:
                printf("Enter value to enqueue:\n ");
                scanf("%d", &value);
                insert(value);
                break;
            case 2:
                delete();
                break;
            case 3:
                display();
                break;
            case 4:
                printf("exiting the program");
                return 0;
            default:
                printf("Invalid choice\n");
        }
    }
    return 0;
}

```

Queue using Stacks Menu:

1. Insert
2. Delete
3. Display
4. Exit

Enter your choice:

1

Enter value to enqueue:

8

Value inserted is 8

Queue using Stacks Menu:

1. Insert
2. Delete
3. Display
4. Exit

Enter your choice:

2

Deleted element is 9

Queue using Stacks Menu:

1. Insert
2. Delete
3. Display
4. Exit

Enter your choice:

3

Queue elements: 7 8

Queue using Stacks Menu:

1. Insert
2. Delete
3. Display
4. Exit

Enter your choice:

2

Deleted element is 7

Queue using Stacks Menu:

1. Insert
2. Delete
3. Display
4. Exit

Enter your choice:

1

Enter value to enqueue:

9

Value inserted is 9

Queue using Stacks Menu:

1. Insert
2. Delete
3. Display
4. Exit

Enter your choice:

1

Enter value to enqueue:

7

Value inserted is 7

Queue using Stacks Menu:

1. Insert
2. Delete
3. Display
4. Exit

Enter your choice:

2

Deleted element is 8

Queue using Stacks Menu:

1. Insert
2. Delete
3. Display
4. Exit

Enter your choice:

2

Queue is empty

Queue using Stacks Menu:

1. Insert
2. Delete
3. Display
4. Exit

Enter your choice:

4

Process returned 0 (0x0) execution time : 18.712 s

Press any key to continue.

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