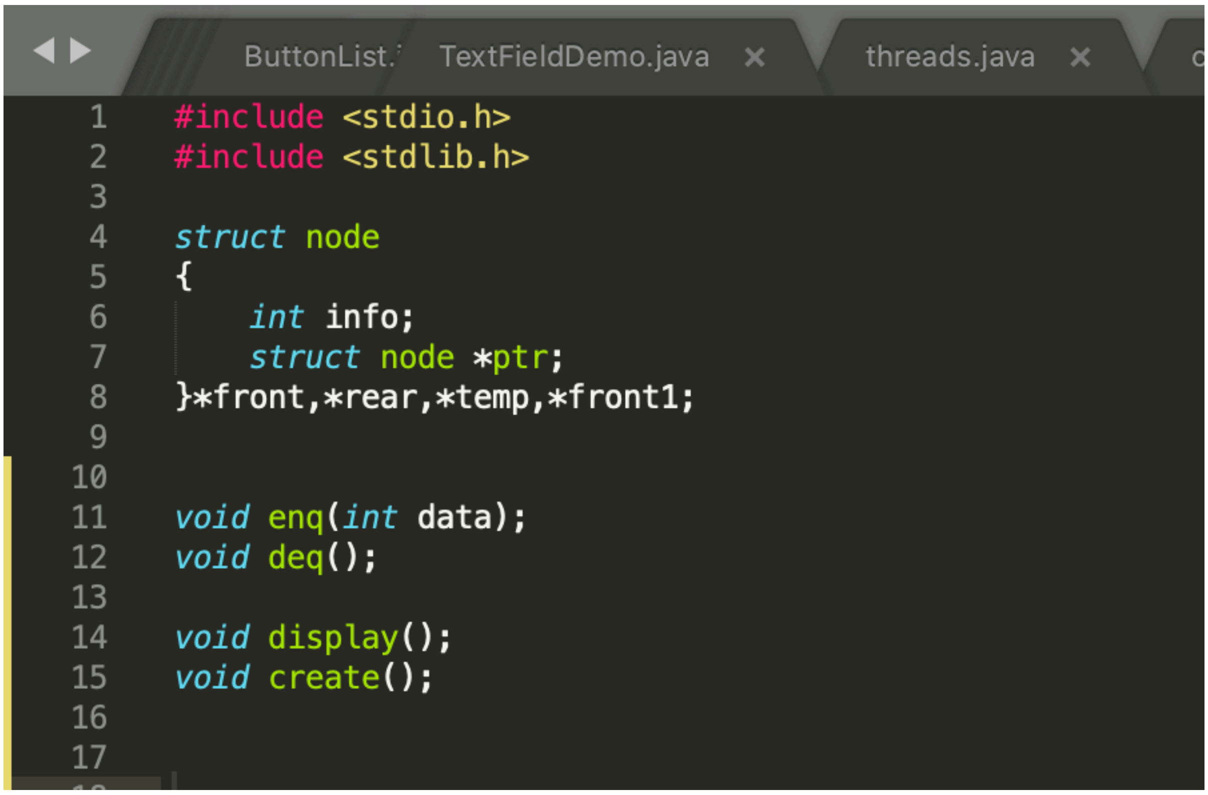
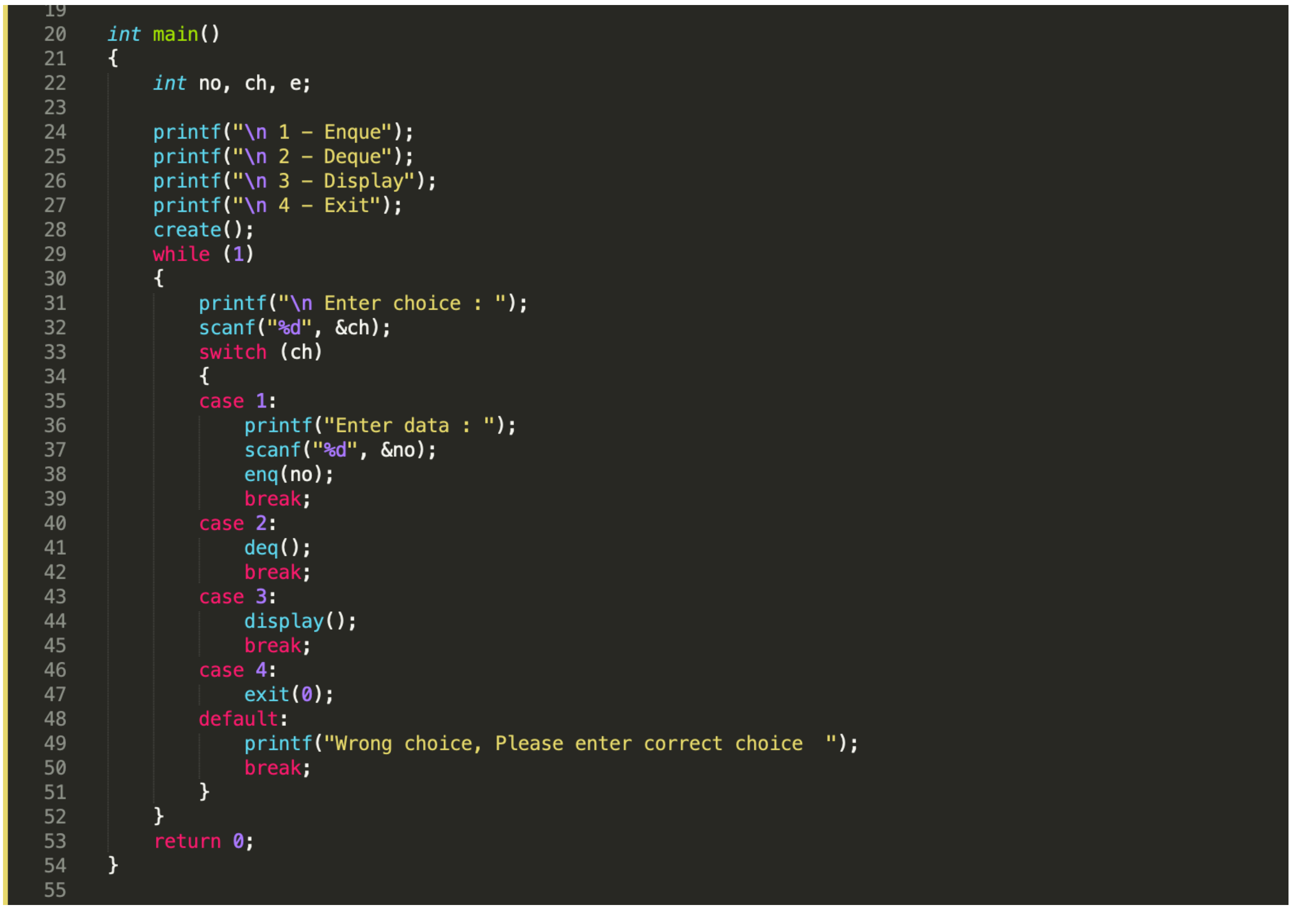
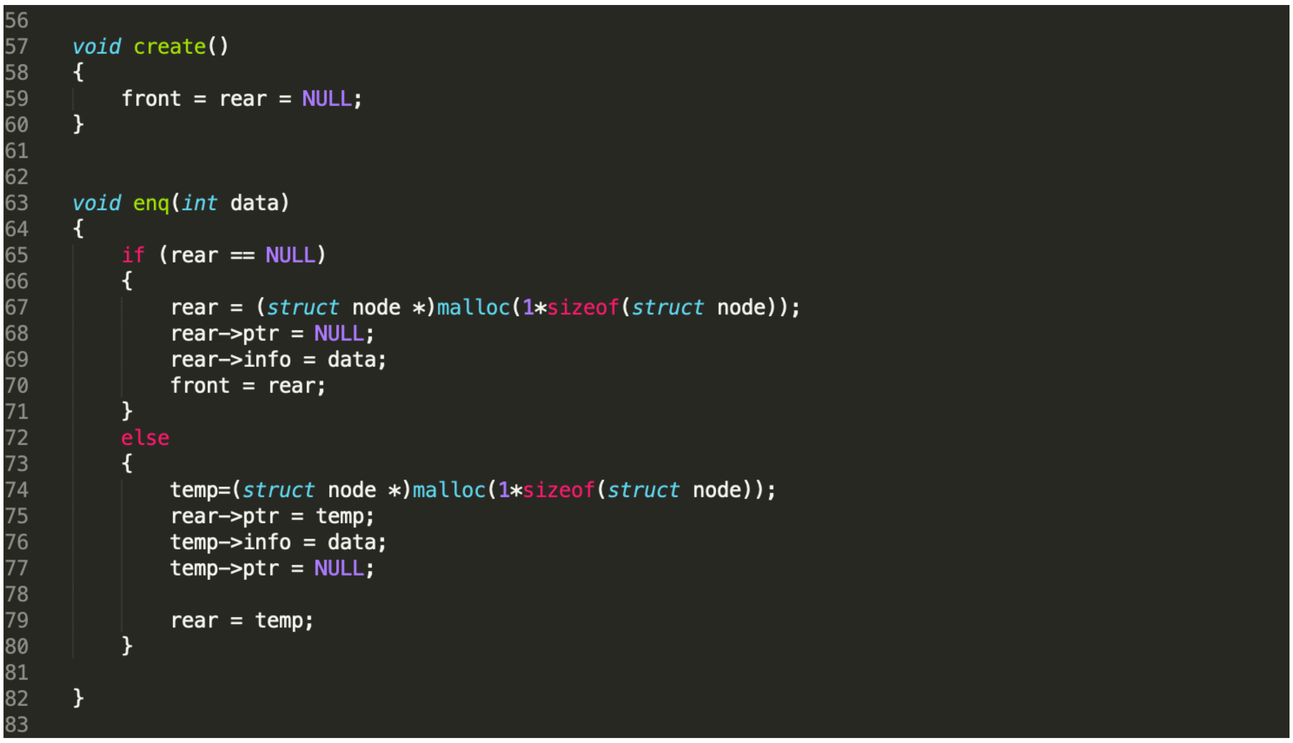


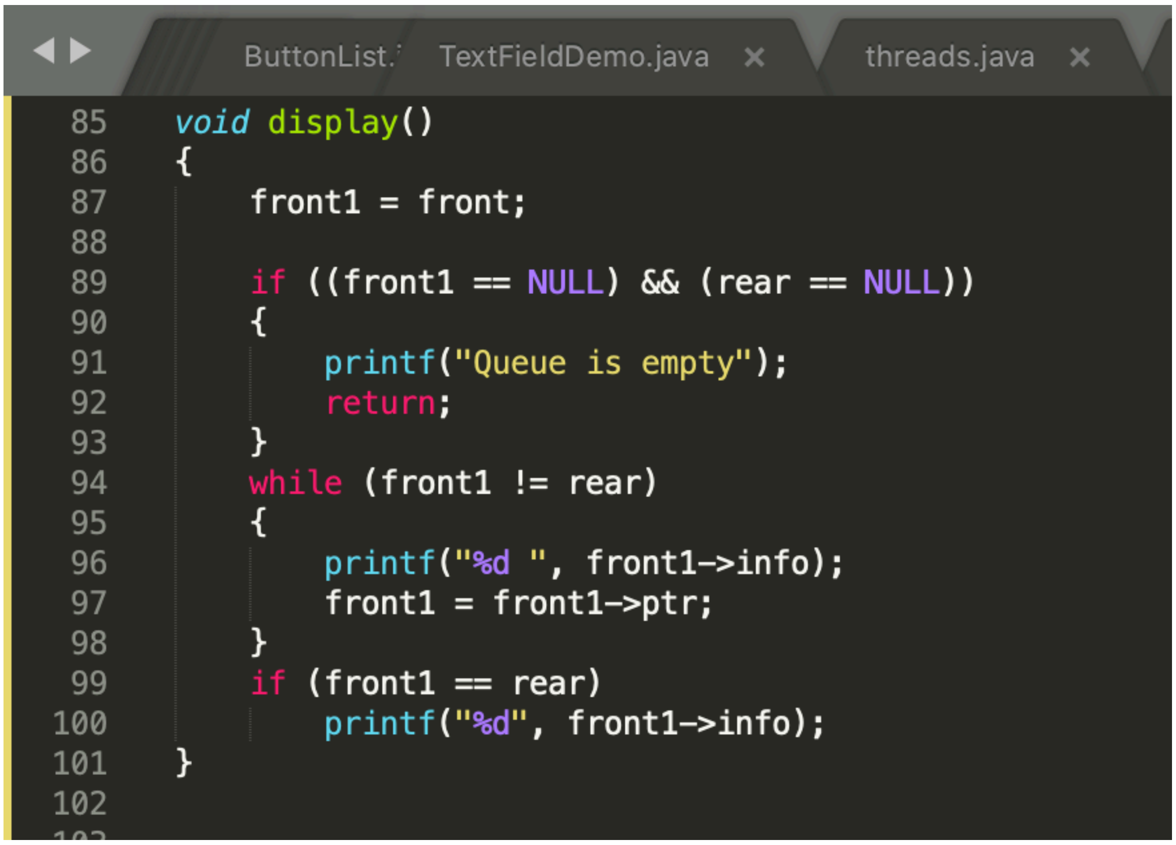
```c
#include <stdio.h>
#include <stdlib.h>

struct node
{
    int info;
    struct node *ptr;
}*front,*rear,*temp,*front1;


void enq(int data);
void deq();

void display();
void create();

```



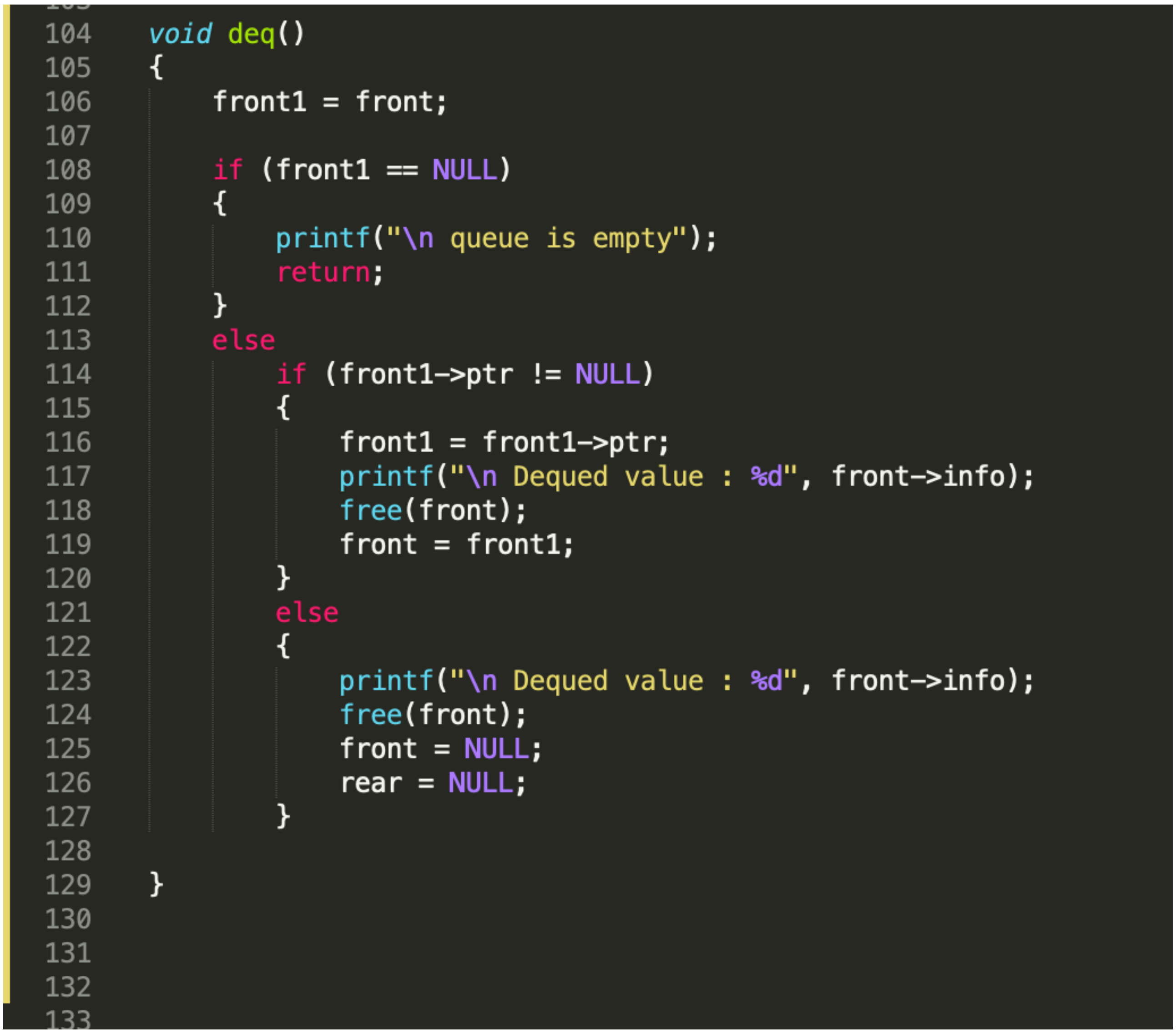
```c

int main()
{
    int no, ch, e;

    printf("\n 1 - Enque");
    printf("\n 2 - Deque");
    printf("\n 3 - Display");
    printf("\n 4 - Exit");
    create();
    while (1)
    {
        printf("\n Enter choice : ");
        scanf("%d", &ch);
        switch (ch)
        {
        case 1:
            printf("Enter data : ");
            scanf("%d", &no);
            enq(no);
            break;
        case 2:
            deq();
            break;
        case 3:
            display();
            break;
        case 4:
            exit(0);
        default:
            printf("Wrong choice, Please enter correct choice  ");
            break;
        }
    }
    return 0;
}

```



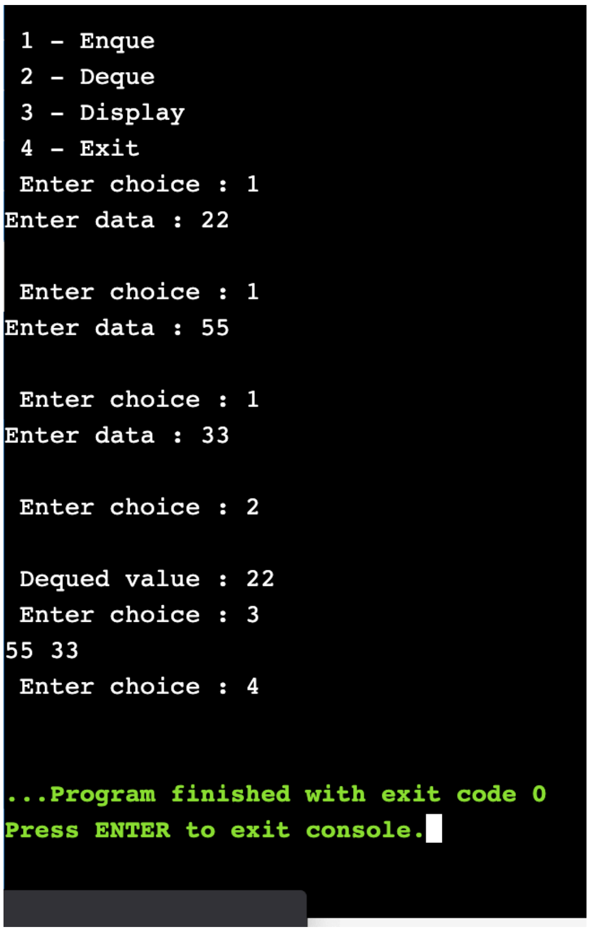
```c

void create()
{
    front = rear = NULL;
}


void enq(int data)
{
    if (rear == NULL)
    {
        rear = (struct node *)malloc(1*sizeof(struct node));
        rear->ptr = NULL;
        rear->info = data;
        front = rear;
    }
    else
    {
        temp=(struct node *)malloc(1*sizeof(struct node));
        rear->ptr = temp;
        temp->info = data;
        temp->ptr = NULL;

        rear = temp;
    }

}

```



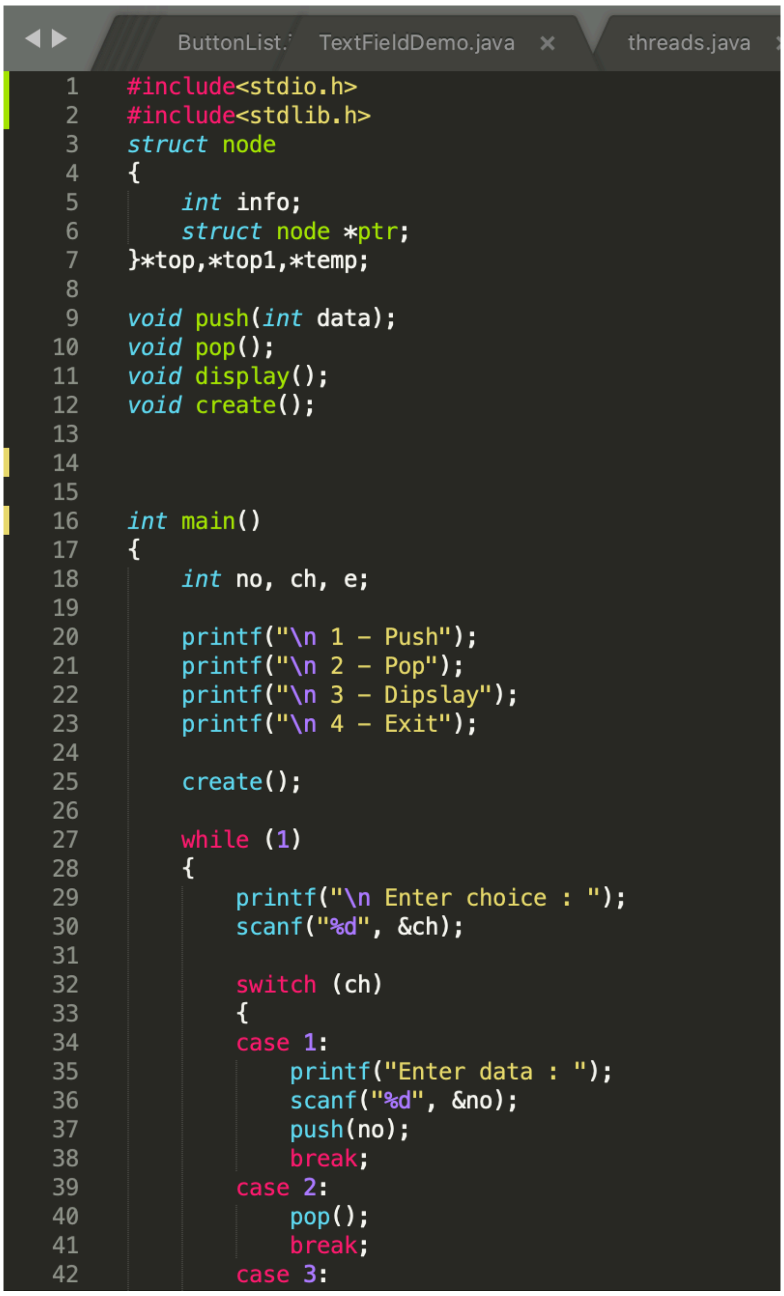
```c
void display()
{
    front1 = front;

    if ((front1 == NULL) && (rear == NULL))
    {
        printf("Queue is empty");
        return;
    }
    while (front1 != rear)
    {
        printf("%d ", front1->info);
        front1 = front1->ptr;
    }
    if (front1 == rear)
        printf("%d", front1->info);
}

```



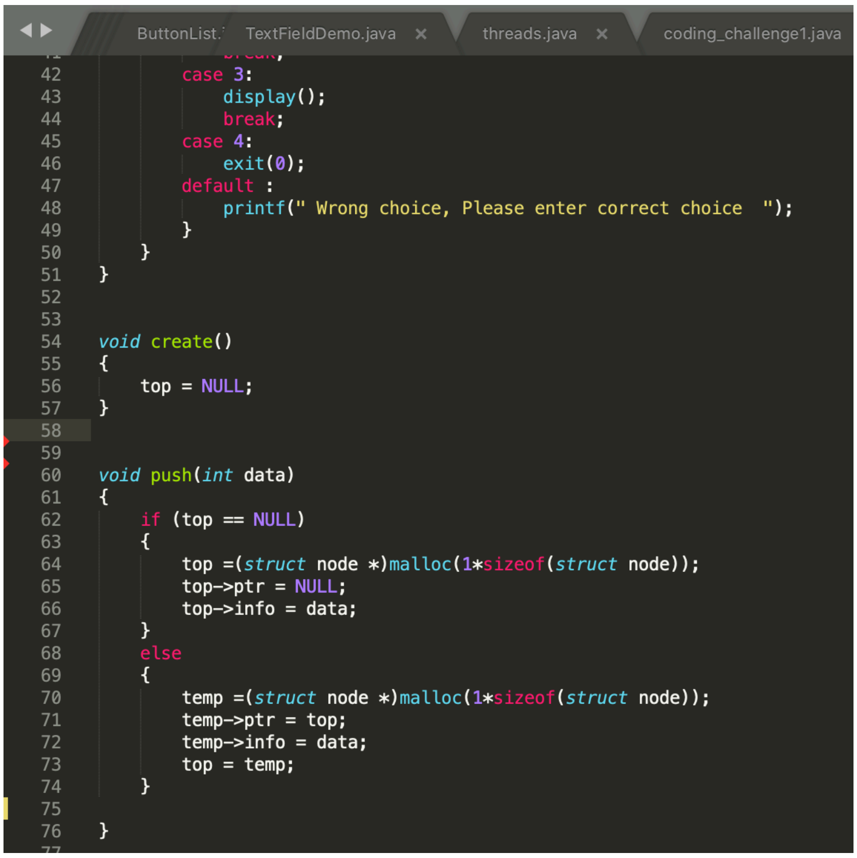
```c
void deq()
{
    front1 = front;

    if (front1 == NULL)
    {
        printf("\n queue is empty");
        return;
    }
    else
        if (front1->ptr != NULL)
        {
            front1 = front1->ptr;
            printf("\n Dequed value : %d", front->info);
            free(front);
            front = front1;
        }
        else
        {
            printf("\n Dequed value : %d", front->info);
            free(front);
            front = NULL;
            rear = NULL;
        }

}
```



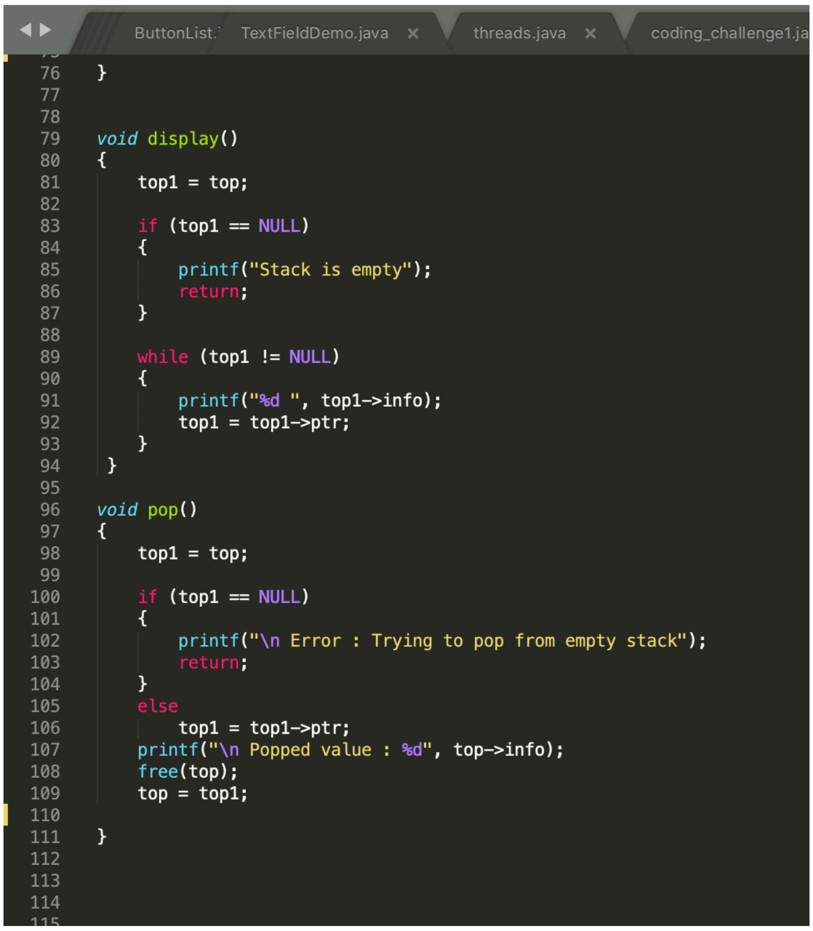
```
 1 - Enque
 2 - Deque
 3 - Display
 4 - Exit
 Enter choice : 1
Enter data : 22

 Enter choice : 1
Enter data : 55

 Enter choice : 1
Enter data : 33

 Enter choice : 2

 Dequed value : 22
 Enter choice : 3
55 33
 Enter choice : 4


...Program finished with exit code 0
Press ENTER to exit console.
```



```c
#include<stdio.h>
#include<stdlib.h>
struct node
{
    int info;
    struct node *ptr;
}*top,*top1,*temp;

void push(int data);
void pop();
void display();
void create();



int main()
{
    int no, ch, e;

    printf("\n 1 - Push");
    printf("\n 2 - Pop");
    printf("\n 3 - Dipslay");
    printf("\n 4 - Exit");

    create();

    while (1)
    {
        printf("\n Enter choice : ");
        scanf("%d", &ch);

        switch (ch)
        {
        case 1:
            printf("Enter data : ");
            scanf("%d", &no);
            push(no);
            break;
        case 2:
            pop();
            break;
        case 3:
```

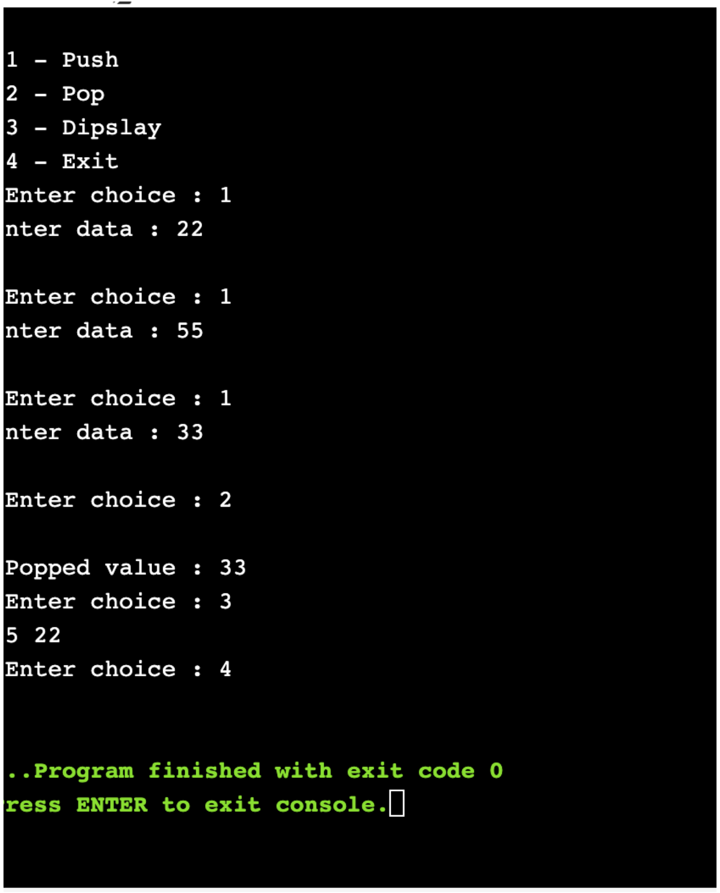


```c
        case 3:
            display();
            break;
        case 4:
            exit(0);
        default :
            printf(" Wrong choice, Please enter correct choice  ");
        }
    }
}


void create()
{
    top = NULL;
}


void push(int data)
{
    if (top == NULL)
    {
        top =(struct node *)malloc(1*sizeof(struct node));
        top->ptr = NULL;
        top->info = data;
    }
    else
    {
        temp =(struct node *)malloc(1*sizeof(struct node));
        temp->ptr = top;
        temp->info = data;
        top = temp;
    }

}
```



ButtonList. TextFieldDemo.java threads.java coding_challenge1.ja

```c
}


void display()
{
    top1 = top;

    if (top1 == NULL)
    {
        printf("Stack is empty");
        return;
    }

    while (top1 != NULL)
    {
        printf("%d ", top1->info);
        top1 = top1->ptr;
    }
 }

void pop()
{
    top1 = top;

    if (top1 == NULL)
    {
        printf("\n Error : Trying to pop from empty stack");
        return;
    }
    else
        top1 = top1->ptr;
    printf("\n Popped value : %d", top->info);
    free(top);
    top = top1;

}
```



```
1 - Push
2 - Pop
3 - Dipslay
4 - Exit
Enter choice : 1
nter data : 22

Enter choice : 1
nter data : 55

Enter choice : 1
nter data : 33

Enter choice : 2

Popped value : 33
Enter choice : 3
5 22
Enter choice : 4


..Program finished with exit code 0
ress ENTER to exit console.
```