

```

#include<stdlib.h>
#include<stdio.h>
#define MAX 5

int count = 0 ,front = 0 , rear = -1 , a[MAX] ;

void insert() {
    if(rear != MAX-1) {
        int item;
        printf("Enter the element to be pushed : ");
        scanf("%d" , &item);
        if(front == 0 && rear == -1)
            a[++rear] = item;
        else {
            int j = rear;
            while(j>=0 && item < a[j]) {
                a[j+1] = a[j];
                j--;
            }
            a[j+1] = item;
            rear++;
        }
        count++;
    }
    else
        printf("Priority queue is empty.\n");
}

void delete() {
    if (rear == -1) {
        printf("Queue is empty.\n");
    }
    else if (front == rear) {
        printf("%d successfully deleted.\n" , a[front]);
        front = 0;
        rear = -1;
    }
    else
        printf("%d successfully deleted.\n" , a[front++]);
}

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

void main() {
    int choice , flag = 1 ;
    printf("Enter the operation to be performed.\n");
    while(flag) {

```

```
");  
  
    printf("1.Insert \t 2.Delete \t 3.Display \t 4.Exit  :  
scanf("%d" , &choice);  
switch(choice) {  
    case 1 : insert();  
            break;  
  
    case 2 : delete();  
            break;  
  
    case 3 : display();  
            break;  
  
    case 4 : flag = 0 ;  
            break;  
  
    default : printf("Invalid input.\n");  
             break;  
}  
}  
}
```