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#include<stdio.h>
#include<stdlib.h>
#define N 5
int queue[N];
int front=-1,rear=-1;
void enqueue(void);
void dequeue(void);
void peek(void);
void display(void);
void main()
{
    int ch;
    while(1)
    {
        printf("1.Enqueue\n");
        printf("2.Dequeue\n");
        printf("3.Peek\n");
        printf("4.Display\n");
        printf("5.Exit\n");
        printf("Enter your choice ");
        scanf("%d",&ch);
        switch(ch)
        {
            case 1: enqueue();
                    break;
            case 2: dequeue();
                    break;
            case 3: peek();
                    break;
            case 4: display();
                    break;
            case 5: exit(0);
            default: printf("Invalid Input\n");
        }
    }
}

void enqueue()
{
    int data;
    printf("Enter your data ");
    scanf("%d",&data);
    if(rear==N-1)
    {
        printf("Overflow condition\n");
    }
    else if(front==-1&&rear==-1)
    {
        front=rear=0;
        queue[rear]=data;
    }
    else
    {
        rear++;
        queue[rear]=data;
    }
}

```

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void dequeue()
{
    if(front==-1&&rear==-1)
    {
        Printf("Underflow condition\n");
        return;
    }
    front++;
}
void peek()
{
    if(front==-1&&rear==-1)
    {
        printf("Underflow condition\n");
        return;
    }
    printf("%d\n",queue[front]);
}
void display()
{
    if(front==-1&&rear==-1)
    {
        printf("Underflow condition\n");
        return;
    }
    for(int i=front;i<=rear;i++)
    {
        printf("%d ",queue[i]);
    }
    printf("\n");
}

```