

Queue

classmate

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```
#include <stdio.h>
void insert();
void delete();
void display();
int Max = 5;
int queue[5];
int rear = -1;
int front = -1;

int main()
{
    int choice, b = 0;
    while (1)
    {
        printf("1 insert element");
        printf("2 delete element");
        printf("3 Display");
        printf("4 Exit");
        scanf("%d", &choice);
        switch (choice)
        {
            case 1: insert(); break;
            case 2: delete(); break;
            case 3: display(); break;
            case 4: b = 1; break;
            default: printf("Error"); }

        if (b == 1) break; } }
```



```
void insert()  
{ int item;  
  if (rear == max - 1)  
    printf("Overflow");  
  else  
  { if (front == -1) front = 0;  
    printf("Enter element");  
    scanf("%d", &item);  
    rear++;  
    queue[rear] = item; } }
```

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

```
void display()  
{ int i  
  if (front == -1)  
    printf("Empty");
```


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else

```
1 printf for (i = front; i <= rear; i++)  
    printf ("%d\n", queue[i]);  
}
```