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//queue operations
#include <stdio.h>
#include<stdlib.h>
#define MAX 50
void insert();
void delete();
void display();
int queue_array[MAX];
int rear = - 1;
int front = - 1;
int main()
{
int choice;
while (1)
{
printf("1.Insert element to queue \n");
printf("2.Delete element from queue \n");
printf("3.Display all elements of queue \n");
printf("4.Quit \n");
printf("Enter your choice : \n");
scanf("%d", &choice);
switch(choice)
{
case 1:
insert();
break;
case 2:
delete();
break;
case 3:
display();
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break;

case 4:

exit(1);

default:

printf("Wrong choice \n");

}

}

}

void insert()

{

int item;

if(rear == MAX - 1)

printf("Queue Overflow \n");

else

{

if(front == - 1)

front = 0;

printf("Insert the element in queue : \n");

scanf("%d", &item);

rear = rear + 1;

queue_array[rear] = item;

}

}

void delete()

{

if(front == - 1 || front > rear)

{

printf("Queue Underflow \n");

return;

}

else
```

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{
printf("Element deleted from queue is : %d\n", queue_array[front]);
front = front + 1;
}
}

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

```

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1.Insert element to queue
2.Delete element from queue
3.Display all elements of queue
4.Quit
Enter your choice :
1
Insert the element in queue :
30
1.Insert element to queue
2.Delete element from queue
3.Display all elements of queue
4.Quit
Enter your choice :
3
Queue is :
30
1.Insert element to queue
2.Delete element from queue
3.Display all elements of queue
4.Quit
Enter your choice :

```