2a ds

```c
#include<stdio.h>
#define maxsize 3
int q[maxsize], front=0,rear=-1;
void insert()
{
int n;
if(rear==maxsize-1)
printf("\nQueue full\n");
else
{
printf("\nEnter the data to be added\n");
scanf("%d", &n);
q[++rear]=n;
}
}
void delete()
{
if(front>rear)
printf("\nQueue is empty\n");
else
{
printf("\n%d is deleted\n",q[front++]);
```

```c
}
}
void display()
{
int i;
if(front>rear)
printf("\nQueue is empty\n");
else
{
printf("\nQueue status is\n");
for(i=front;i<=rear;i++)
printf("%d\t",q[i]);
}
}
int main()
{
int ch;
while(1)
{
printf("1.Insert\n2.Delete\n3.Display\n4.Exit\n");
puts("\nEnter your choice\n");
scanf("%d",&ch);
switch(ch)
{
case 1: insert(); break;
case 2:delete(); break;
case 3:display(); break;
case 4: return 0;
default :printf("\nInvalid choice\n");
```

```
}

}

}
```