```
#include<stdio.h>
#include<stdlib.h>
#define SIZE 3
int item;
int front=0,rear=-1,q[SIZE],count=0;
void insertrear()
{
   if(count==SIZE)
   {
      printf("\nqueue overflow\n");
      return;
   }
   rear=(rear+1)%SIZE;
   q[rear]=item;
   count++;
}
int deletefront()
{
   if(count==0)
   return -1;
   item=q[front];
   front=(front+1)%SIZE;
   count=count-1;
   return item;
}
void displayQ()
{
   int i,f;
   if(count==0)
   {
      printf("queue is empty\n");
      return;
   }
   f=front;
   printf("contents of queue \n");
   for(i=1;i<=count;i++)
   {
      printf("%d\n",q[f]);
      f=(f+1)%SIZE;
   }
}
int main()
{
   int choice;
```

```
    for(;;)
    {
    printf("\n1.insertrear\n2.deletefront\n3.display\n4.exit\n");
    printf("enter choice\n");
    scanf("%d",&choice);
    switch(choice)
    {
       case 1:printf("Enter the item to be inserted:\n ");
              scanf("%d",&item);
              insertrear();
              break;
       case 2:item=deletefront();
              if(item==-1)
              printf("Queue is empty\n");
              else
               printf("Item deleted: %d\n",item);
                break;
       case 3: displayQ();
               break;
       default: exit(0);
    }
    }
}
```