```
# include <stdio.h>
# include <conio.h>
# define qsize 3
int f=0, r=-1, ch;
int item, q[10];
int isfull()
{ return (r==qsize-1) ? 1:0;
}
int isempty(int f, int r)
{ return (f>r) ? 1:0;
}
void insertrear()
{ if(isfull(r))
{ pf("Queue Overflow");
return;
}
r=r+1;
q[r]= item;
}
void delete_front()
{ if (isempty(f,r))
{ pf ("Queue Underflow");
return;
}
```

```
Pf ("item deleted is %d \n", q[(j)++]);
   if (j>r)
      {j=0;
       r=-1;
      }
   }
void insert_front()
   {  if (j!=0)
        {  t=j-1;
           q[j]=item;
           return;
        }
      else if ((j==0) && (r==-1))
        {  q[++(r)]=item;
           return;
        }
      else
      printf ("insertion not possible \n");
   }
```

```
Void display ()
{ int i;
  if (isempty(f,r))
  { pf("queue empty \n");
    return;
  }
 for (i=f;i<=r;i++)
   pf("%d\n",q[i]);
}
void main()
{ clrscr()
 for(;;)
 {
  printf("\n1: insert_rear \n2: insert front \n
                \n3: delete front \n 4 display \n")
  print("enter choice ");
  scanf("%d ",&ch);
  switch(ch)
{ case 1: printf(" enter the item ");
          scanf("%d",&item);
          insert_rear();
          break;
 case 2: pf(" enter the item ");
          scanf("%d",&item);
          insert_front();
          break;
  case 3: delete_front();
          break;
  case 4: display()
          break;
  default: exit(0);
                    }}
```