Linear Queue

```
#include <stdio.h>
#include <process.h>
#define QUE_SIZE 3
int item, front = 0, rear = -1, q[10];
void insert rear()
{
  if (rear == QUE_SIZE - 1)
  {
   printf("\n ... \n Queue Overflow \n...-\n");
   return;
  }
 rear += 1;
 q[rear] = item;
}
int delete front()
{
  if (front > rear)
  {
   front = 0;
   rear = -1;
   return -1;
  }
  return q[front++];
}
```

```
void display q ()
{
   int i ;
   if (front > rear)
{
   printf (" \n" ---- \n queue is empty \n --- \n"
   return ;
}
printf ("Contents of the queue : \n");
for (i= front ; i<= rear ; i++ ) :
{
   printf (" %d" \n", q[i]);
}
}

void main ()
{
   int choice
   for (;;)
{
   printf (" \n 1: Insert Rear \n 2. Delete Front \n
            3: Display queue \n 4. EXIT \n");
printf ("Enter your choice: ");
scanf ("%d", & choice);
switch choice
{
```

```
case 1 :- printf ("\n Enter the value to be inserted: ");
        scanf ("%d", &item);
        insert rear (item);
        break ;
case 2 : item = delete front ();
        if (item == -1)
    printf ("\n ---- In QUEUE is empty\n" ---- \n);
        else
        printf ("Item deleted = %d \n", item);
case 3 : display ();
        break ;
    default : return ;
    }
  }
}
//
```