3rd Lab program

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

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

void main()
{

  int choice;
  for(;;)
  {
  printf ("\n1: insertrear\n2: deletefront
          \n3: display\n4: exit\n");
  printf ("Enter the 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 emty \n");
             else
             printf (" Item deleted = %d \n",
                                item);
             break;
    case 3 : displayQ();
             break;
    default : exit(0);
    }
}
```