lab program 3

①
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#include <stdio.h>
#include <stdlib.h>
#define QUE_SIZE 5
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 displayQ()
{
int i;
if (front > rear)
{
printf("QUEUE is empty\n");
for (i = front; i <= rear; i++)
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 inser-
        ted : ");
    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: display();
  break;
default : return;
}
}
```