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LAB-5

```
#include <stdio.h>
#include <stdlib.h>
#include <process.h>
#define que_size 3
int item, front = 0, rear = -1, q[que_size], count = 0;
void insertrear()
{
  if (count == que_size)
  {
    printf("queue underflow");
      return;
  }
  rear = (rear + 1) % que_size;
   q[rear] = item;
   count ++;
}
int deletefront()
{
  if (count == 0) return -1;
     item = q[front];
  front = (front + 1) % que_size;
     count = count - 1;
       return item;
}
void display q()
  {
    int i, f;
     if (count == 0)
    {
       printf("queue is empty");
```

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```
return;
}
f = front;
printf("contents of queue \n");
for (i=0; i<= count ; i++)
{
    printf("%d\n", q[f]);
    f = (f+1) % que_size;
}
}
void main()
{
  int choice;
  for(;;)
  {
    printf("\n1.Insert rear \n2. Delete front \n3.
      Display \n4. exit \n");
    printf("Enter the choice : ");
    scanf("%d", &choice);
    switch(choice)
    {
    case 1: printf("Enter the item to be
        inserted : ");
      scanf("%d", &item);
      insertrear();
      break;
    case 2: item = deletefront();
      if(item == -1)
      printf(queue is empty\n");
      else
      printf("item is deleted is %d\n", item);
      break
```

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```
case 3: display q ();
        break;
default: exit (0);
    }
  }
getch ();
}
```

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