Queue Program

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```
#include <stdio.h>
#include <conio.h>
#define SIZE 3

int front = 0;
int rear = -1;
int queue[SIZE];

void Enque(int);
int Deque();
void display();
int main()
{
 int c;
 int item;
 do{
    printf("1. to Enqueue \n");
    printf("2. to Dequeue \n");
    printf("3 to Display \n");
    printf("4. to Exit \n");
    printf("Enter your choice: \n");
    scanf("%d", &c);
```

```
switch (c)
 {
  case 1: printf ("Enter the elements\n");
          scanf ("%d", &item);
          Enque (item);
          break;
  case 2: item = Deque ();
          if (item == -1)
          printf ("Queue is empty\n");
          else
          printf ("deleted element is %d\n", item);
          break;
   case 3: display();
           break;
   case 4: exit (0);
  }
  } while (c != 4);
  return 0;
}
void Enque (int element)
 {
  if (rear = SIZE - 1)
     printf ("Queue is full\n");
  else
   {
     rear++
     queue [rear] = element;
  }
```

```
int Deque()
{
  int item;
  if (front == -1)
  return -1;
  else
  {
  item = queue[front];
  front++;
   if (front > rear){
    {
    front = -1;
    rear = -1;
    }
  }
 return item;
}
void display()
{
  int i;
  if (front == -1)
   printf("Queue is empty\n");
  else
   {  printf("Queue contents \n");
      for (i = front; i <= rear; i++)
      {
        printf("%d\n", queue[i]);
      }
  }
}
```