QUEUE OPERATIONS

CODE:

```
#include<stdio.h>
#include<conio.h>
#define max 6
int q[max];
int front=-1,rear=-1,ch,n,i;
void enqueue();
void dequeue();
void display();
int main()
{
printf("\n\t Queue operations using array\n");
printf("\n menu\n1.Insert\n2.Delete\n3.Display\n4.Exit\n");
do
{
   printf("\nEnter the choice");
   scanf("%d",&ch);
   switch(ch)
   {
```

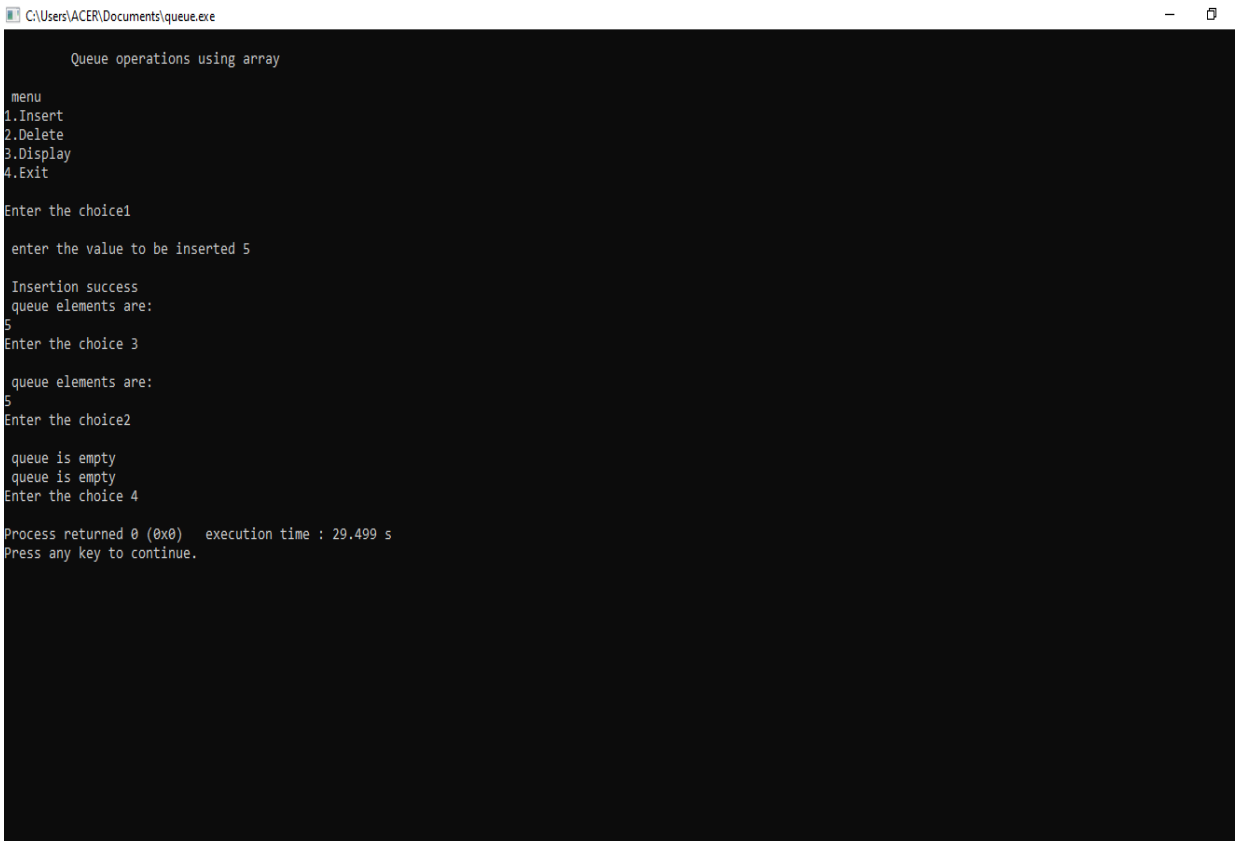
```
        case 1:enqueue();
               break;
        case 2:dequeue();
               break;
        case 3:display();
               break;
        case 4:exit(0);
               break;
        default:
           printf("\n Enter a valid choice");

}
}
while(ch!=4);
   return 0;
}

void enqueue()
{
   if(rear==max-1)
   {
```

```
        printf("\n overflow element can't be enter");
    }
    else
    {
        printf("\n enter the value to be inserted");
        scanf("%d",&n);
        if(front==-1)
            front=0;
        rear++;
        q[rear]=n;
        printf("\n Insertion success");
        display();
    }
}

 void dequeue()
 {
     if(front==rear)
     {
         printf("\n queue is empty");
         front=rear=-1;
```

```
      display();
  }
  else
    {
        printf("\n deleted the element  :%d",q[front]);
        front++;
    }
  }
void display()
{
   if(rear==-1)
   {
      printf("\n queue is empty");
   }
      else
      {
          printf("\n queue elements are:\n");
          for(i=front;i<=rear;i++)

      printf("%d\t",q[i]);
   }
```

}

OUTPUT:


C:\Users\ACER\Documents\queue.exe
Queue operations using array
menu
1.Insert
2.Delete
3.Display
4.Exit
Enter the choice1
enter the value to be inserted 5
Insertion success
queue elements are:
5
Enter the choice 3
queue elements are:
5
Enter the choice2
queue is empty
queue is empty
Enter the choice 4
Process returned 0 (0x0) execution time : 29.499 s
Press any key to continue.