**EXPERIMENT NO.5**

**Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Aim:** Write a program to count the even numbers in a queue using array.

**Algorithm/Pseudo-Code:**

1. Enqueuer all elements in queue
2. To count even no in queue

for loop i=0 to arr.length-1

1. If arr[i]%2==0

Count++

return count

1. initialize no variable to count and print it

**Program:**

class QueueEven

{

int front= -1;

int rear= -1;

int[]arr=new int[6];

void enqueue(int item)

{

if(isFull()){

System.out.println("OverFlow!! Queue is Full");

}

else

{

if(front==-1);

front=0;

rear=rear+1;

arr[rear]=item;

}

}

int dequeue()

{

if(isEmpty())

{

System.out.println("UnderFlow!! Queue is Empty");

return 0;

}

else

{

int temp=arr[front];

front=front+1;

return temp;

}

}

int countEven()

{

int count=0;

for(int i=0;i<=arr.length-1;i++)

{

if(arr[i]%2==0)

count++;

}

return count;

}

boolean isEmpty()

{

if(front==rear+1)

return true;

else

return false;

}

boolean isFull()

{

if(rear==arr.length-1)

return true;

else

return false;

}

void DisplayQueue()

{

int temp=front;

System.out.println("[");

while(temp!=rear+1)

{

System.out.println(arr[temp]+"");

temp=temp+1;

}

System.out.println("]");

}

public static void main(String[] args)

{

QueueEven queue =new QueueEven();

queue.enqueue(1);

queue.enqueue(2);

queue.enqueue(3);

queue.enqueue(2);

queue.enqueue(50);

queue.enqueue(6);

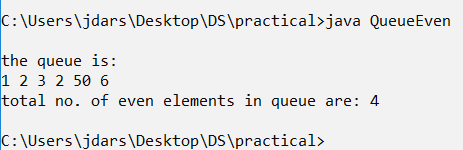
int no=queue.countEven();

System.out.println("total no. of even elements in queue are: "+no);

}

}

**Output:**

****