

/*Date: 19-7-25

A college help desk uses a ticketing system to manage student queries. Students are served in the order they raise their queries — First-Come, First-Served (FIFO). Implement this system using a Queue with array-based implementation and switch-case menu.

Features to Implement

1. Raise a Ticket – (Enqueue)
2. Resolve a Ticket – (Dequeue)
3. Display All Tickets
4. Exit*/

```
package julyhometask;
```

```
import java.util.*;
```

```
class TicketSystem
```

```
{
```

```
    int front,rear,capacity;
```

```
    String ticketArray[];
```

```
    TicketSystem(int size)
```

```
    {
```

```
        front=rear=0;
```

```
        capacity=size;
```

```
        ticketArray=new String[capacity];
```

```
    }
```

```
    public void enqueue(String query)
```

```
    {
```

```
        if(rear==capacity)
```

```
        {
```

```
            System.out.println("The Ticket raising system is full");
```

```
        }
```

```
        else
```

```
        {
```

```

        ticketArray[rear]=query;

        rear=rear+1;

        System.out.println("The ticket:"+query+" is raised successfully");

    }

}

public void dequeue()
{
    if(front==rear)
    {
        System.out.println("The Ticket raising system is empty");

    }

    System.out.println("The ticket "+ ticketArray[front]+" is resolved successfully");
    for(int i=0;i<rear-1;i++)
    {
        ticketArray[i]=ticketArray[i+1];

    }

    rear=rear-1;

}

void display()
{
    if(front==rear)
    {
        System.out.println("The Ticket raising system is empty");

    }

    else

```

```

        {
            System.out.println("The ticket systems have the following queries from the
users:");
        }

        for(int i=front;i<rear;i++)
        {
            System.out.println(ticketArray[i]);
        }
    }
}

```

public class july19ht

```

{
    public static void main(String[] args)
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the maximum queries for the system");
        int size=sc.nextInt();
        TicketSystem t=new TicketSystem(size);
        int choice;
        do
        {
            System.out.println("1.Ticket raisal\n2.Ticket Resolve\n3.Display tickets\n4.Exit");
            System.out.println("Enter the choice");
            choice=sc.nextInt();
            sc.nextLine();
            switch(choice)
            {
                case 1:

```

```
        System.out.println("Enter the query");

        String query=sc.nextLine();

        t.enqueue(query);

        break;

    case 2:

        t.dequeue();

        break;

    case 3:

        t.display();

        break;

    case 4:

        System.out.println("--Exiting---");

        break;

    default:

        System.out.println("Enter a=valid operation");

        break;

}

}while(choice!=4);

}

}
```