

```
//Railway Reservation Ticket Booking System
```

```
import java.util.ArrayList;
```

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

```
class Train
```

```
{
```

```
    private String tname;
```

```
    //private int aseats=50;
```

```
    private int as;
```

```
    public String pname[]=new String[100];
```

```
    public int page[]=new int[100];
```

```
    int c=1,nop;
```

```
    Train()
```

```
{
```

```
}
```

```
    Train(String[] pname,int[] page)
```

```
{
```

```
        this.pname=pname;
```

```
        this.page=page;
```

```
}
```

```
    public void setAs(int as)
```

```
{
```

```
        this.as=as;
```

```
}
```

```
    public int getAs()
```

```
{
```

```

        return as;
    }

    void express()
    {
        System.out.println("-----");
        System.out.println("Ticket(s) booked successfully!");
        System.out.println("Seats remaining:"+(this.as));

    }
}

class Main
{
    public static void main(String[] args)
    {
        Scanner sc=new Scanner(System.in);

        int i=1,count=1,ch,j=1,count1=0;

        String tname;

        String pname[]=new String[100];

        String x[]=new String[100];

        int page[]=new int[100];

        int nop,as=50,as1=50;

        HashMap<String,Integer> h=new HashMap<String,Integer>();

        ArrayList<String> name = new ArrayList<String>();

        ArrayList<String> na=new ArrayList<String>();

        System.out.println("*****");

        System.out.println("\t\tWelcome to Railway Ticket Reservation Console Application");

        System.out.println("*****");
    }
}

```

```

do{

    System.out.println("Please choose the option");

    System.out.println("1. Book the Ticket \n2. Exit");

    ch=sc.nextInt();

    switch(ch)

    {

        case 1:

            System.out.println("Enter the Train name:");

            tname=sc.next();

            System.out.println("Enter the number of tickets you want to book:");

            nop=sc.nextInt();

            if(h.containsKey(tname))

            {

                int x1=h.get(tname);

                h.put(tname,x1-nop);

                System.out.println("Passenger Details:");

                for(i=1;i<=nop;i++)

                {

                    System.out.println("Passenger "+i+" details ");

                    pname[i]=sc.next();

                    if (name.contains(pname[i]))

                    {

                        System.out.println("Name already exists!");

                        i=i-1;

                    }

                    else

```

```

{
    sc.nextLine();
    page[i]=sc.nextInt();
    Train t1=new Train(pname,page);
    name.add(pname[i]);
}
}

        count=50-x1 +1;
}
else
{
    h.put(tname,50-nop);
    for(i=1;i<=nop;i++)
    {

        System.out.println("Passenger "+i+" details ");
        pname[i]=sc.next();

        if (na.contains(pname[i]))
        {
            System.out.println("Name already exists!");
            i=i-1;
        }
        else
        {
            sc.nextLine();
            page[i]=sc.nextInt();

```

```

Train t1=new Train(pname,page);

name.add(pname[i]);

na.add(pname[i]);

}

count=1;

}

na.clear();

}

```

```

Train t=new Train();

```

```

System.out.println("*****");

System.out.println("          Your Ticket Details          ");

System.out.println("*****");

System.out.println("          Train name:"+tname+"          ");

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

System.out.println("          Passenger Details          ");

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

System.out.println("passenger name\t\t passenger age\t\tpassenger seat");

for(i=1;i<=nop;i++)

{

System.out.print(pname[i]+"\\t\\t");

System.out.print(page[i]+"\\t\\t");

```

```

        System.out.print(count+"\t\t");

        count++;

        System.out.println();

    }

    as=50;

    as=as-(count-1);

    t.setAs(as);

    t.express();

    break;

case 2: System.out.println("Thank you for using the Ticket Reservation System. Goodbye!");

break;

default: System.out.println("Invalid input");

}

}while(ch!=2);

}

}

```

Output :

```

*****

```

Welcome to Railway Ticket Reservation Console Application

```

*****

```

Please choose the option

1. Book the Ticket

2. Exit

1

Enter the Train name:

express

Enter the number of tickets you want to book:

2

Passenger 1 details

sravya

18

Passenger 2 details

sudha

20

\*\*\*\*\*

### Your Ticket Details

\*\*\*\*\*

Train name:express

-----

### Passenger Details

-----

passenger name	passenger age	passenger seat
sravya	18	1
sudha	20	2

-----

Ticket(s) booked successfully!

Seats remaining:48

Please choose the option

1. Book the Ticket

2. Exit

2

Thank you for using the Ticket Reservation System. Goodbye!