```
Code:
class Planet{
String name;
String[] surfaceGasses;
int numberOfMoons;
boolean hasRings;
Planet(String name, String[] surfaceGasses, int numberOfMoons,boolean hasRings)
{
this.name=name;
this.surfaceGasses=surfaceGasses;
this.numberOfMoons=numberOfMoons;
this.hasRings=hasRings;
}
}
class Planets{
Planet[] planets;

Planets(Planet[] p)
{
planets=p;
}

int countOfMoons(){
int i;
int count=0;
for(i=0;i<planets.length;i++)
{
if(planets[i].hasRings)
{
count+=planets[i].numberOfMoons;
}
}
return count;
}

String gasOnMaxPlanets()
{
int i;
int j;
int maxc=Integer.MIN_VALUE;
String gas="";
HashMap<String,Integer> hm=new HashMap<String, Integer>();
for(i=0;i<planets.length;i++)
{
```

```java
Planet p=planets[i];
for(j=0;j<p.surfaceGasses.length;j++)
{
if(hm.containsKey(p.surfaceGasses[j]))
{
hm.put(p.surfaceGasses[j],hm.get(p.surfaceGasses[j])+1);
}
else
{
hm.put(p.surfaceGasses[j],1);
}
if(hm.get(p.surfaceGasses[j])>maxc)
{
gas=p.surfaceGasses[j];
maxc=hm.get(p.surfaceGasses[j]);
}
}
}
return gas;
}
}
Class
import java.util.*;
class Planet{
String name;
String[] surfaceGasses;
int numberOfMoons;
boolean hasRings;
Planet(String name, String[] surfaceGasses, int numberOfMoons,boolean hasRings)
{
this.name=name;
this.surfaceGasses=surfaceGasses;
this.numberOfMoons=numberOfMoons;
this.hasRings=hasRings;
}
}
class Planets{
Planet[] planets;

Planets(Planet[] p)
{
planets=p;
}
```

```java
int countOfMoons(){
int i;
int count=0;
for(i=0;i<planets.length;i++)
{
if(planets[i].hasRings)
{
count+=planets[i].numberOfMoons;
}
}
return count;
}

String gasOnMaxPlanets()
{
int i;
int j;
int maxc=Integer.MIN_VALUE;
String gas="";
HashMap<String,Integer> hm=new HashMap<String, Integer>();
for(i=0;i<planets.length;i++)
{
Planet p=planets[i];
for(j=0;j<p.surfaceGasses.length;j++)
{
if(hm.containsKey(p.surfaceGasses[j]))
{
hm.put(p.surfaceGasses[j],hm.get(p.surfaceGasses[j])+1);
}
else
{
hm.put(p.surfaceGasses[j],1);
}
if(hm.get(p.surfaceGasses[j])>maxc)
{
gas=p.surfaceGasses[j];
maxc=hm.get(p.surfaceGasses[j]);
}
}
}
return gas;
}
public class Main {
```

```java
    public static void main(String[] args) {
        System.out.println("Hello World!");
        String[] x=new String[]{"n","q","p"};
        Planet a=new Planet("xyx",x,5,true);
         x=new String[]{"h","n","q"};
        Planet b=new Planet("yux",x,2,false);
            x=new String[]{"n"};
        Planet c=new Planet("num",x,3,true);
        Planet[] y=new Planet[]{a,b,c};
Planets pp=new Planets(y);
        System.out.println( pp.countOfMoons());
        System.out.println(  gasOnMaxPlanets());


    }
}
```