**package** Assesment2;

//Main-

**public** **class** Plannet

{

**public** **static** **void** main(String[] args)

{

AbstractBase planet;

planet =**new** mercury();

planet.Name();

planet.gasses();

planet.moon();

planet.rings();

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

planet =**new** venus();

planet.Name();

planet.gasses();

planet.moon();

planet.rings();

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

planet = **new** earth();

planet.Name();

planet.gasses();

planet.moon();

planet.rings();

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

planet =**new** jupitor();

planet.Name();

planet.gasses();

planet.moon();

planet.rings();

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

planet =**new** satturn();

planet.Name();

planet.gasses();

planet.moon();

planet.rings();

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

planet =**new** uranus();

planet.Name();

planet.gasses();

planet.moon();

planet.rings();

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

}

}

**package** Assesment2;

//Base class

**abstract** **class** AbstractBase

{

**abstract** **void** Name();

**abstract** **void** gasses();

**abstract** **int** moon();

**abstract** **void** rings();

}

**package** Assesment2;

//1

**public** **class** mercury **extends** AbstractBase

{

**public** **void** Name()

{

String name= "Mercury";

System.***out***.println("Name of the Planet:"+name);

}

**public** **void** gasses()

{

System.***out***.println("Mercury has no Atmospheric gasses");

}

**public** **int** moon()

{

System.***out***.println("Mercury has zero moon");

**int** moon=0;

**return** moon;

}

**public** **void** rings()

{

System.***out***.println("Mercury has No Rings");

}

}

**package** Assesment2;

//2

**public** **class** venus **extends** AbstractBase

{

//1 planet name

**public** **void** Name()

{

String name= "Venus";

System.***out***.println("Name of the Planet:"+name);

}

//2 surface gasses,

**public** **void** gasses()

{

System.***out***.println("Venus has Atmospheric gasses like,Carbon Dioxide, Nitrogen");

}

//3.number of moons

**public** **int** moon()

{

System.***out***.println("Venus has zero moon");

**int** moon=0;

**return** moon;

}

//4.whether planet has

**public** **void** rings()

{

System.***out***.println("Venus has No Rings");

}

}

**package** Assesment2;

//3

**public** **class** earth **extends** AbstractBase

{

**public** **void** Name()

{

String name= "Earth";

System.***out***.println("Name of the Planet:"+name);

}

**public** **void** gasses()

{

System.***out***.println("Earth has Atmospheric gasses like, Nitrogen, Oxygen ");

}

**public** **int** moon()

{

System.***out***.println("Earth has One moon");

**int** moon=1;

**return** moon;

//return 0;

}

**public** **void** rings()

{

System.***out***.println("Earth has No Rings");

}

}

**package** Assesment2;

//4

**public** **class** jupitor **extends** AbstractBase

{

**public** **void** Name()

{

String name= "Jupitor";

System.***out***.println("Name of the Planet: "+name);

}

**public** **void** gasses()

{

System.***out***.println("Jupitor has Atmospheric gasses like, Hydrogen, Helium ");

}

**public** **int** moon()

{

System.***out***.println("Jupitor has 79 moon");

**int** moon=79;

**return** moon;

}

**public** **void** rings()

{

System.***out***.println("Jupitor has Ring");

}

}

**package** Assesment2;

//5

**public** **class** satturn **extends** AbstractBase

{

//1 planet name

**public** **void** Name()

{

String name= "Saturn";

System.***out***.println("Name of the Planet: "+name);

}

//2 surface gasses,

**public** **void** gasses()

{

System.***out***.println("Saturn has Atmospheric gasses like, Hydrogen, Helium ");

}

//3.number of moons

**public** **int** moon()

{

System.***out***.println("Satturn has 83 moon");

**int** moon=83;

**return** moon;

}

//4.whether planet has

**public** **void** rings()

{

System.***out***.println("Satturn has Ring");

}

}

**package** Assesment2;

//6

**public** **class** uranus **extends** AbstractBase

{

//1 planet name

**public** **void** Name()

{

String name= "Uranus";

System.***out***.println("Name of the Planet:"+name);

}

//2 surface gasses,

**public** **void** gasses()

{

System.***out***.println("Uranus has Atmospheric gasses like, Hydrogen, Helium, Methane ");

}

//3.number of moons

**public** **int** moon()

{

System.***out***.println("Uranus has 27 moon");

**int** moon=27;

**return** moon;

}

//4.whether planet has

**public** **void** rings()

{

System.***out***.println("Uranus has Ring");

}

}