**public** **enum** Planet {

***MERCURY*** (3.303, 2.43),

***VENUS*** (4.869, 6.05),

***EARTH*** (5.976, 6.37),

***MARS*** (6.421, 3.39),

***JUPITER*** (1.9, 7.14),

***SATURN*** (5.67, 6.02),

***URANUS*** (8.68, 2.55),

***NEPTUNE*** (1.02, 2.47);

**public** **static** **final** **double** ***G*** = 6.67;

**private** **final** **double** mass; // in kilograms

**private** **final** **double** radius; // in meters

Planet(**double** mass, **double** radius)

{

**this**.mass = mass;

**this**.radius = radius;

}

**public** **double** getMass() { **return** **this**.mass; }

**public** **double** getRadius() { **return** **this**.radius; }

**double** surfaceGravity() {

**return** ***G*** \* mass / (radius \* radius);

}

}

**public** **class** PlanetDriver {

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

// Planet p=Planet.EARTH;

// double ans=p. surfaceGravity();

// System.out.println("Mass of "+p+" is "+p.getMass());

// System.out.println("Radius of "+p+" is "+p.getRadius());

// System.out.println("Surface Gravity Of " + p + "is " +ans);

**for** (Planet planet : Planet.*values*())

System.***out***.println(String.*format*("Surface Gravity Of %s is %f",planet,planet.surfaceGravity()));

}

}