Enum - Java Challenges & Code

1. Define an enum for days of the week

public class DaysOfWeekEnum {

enum Day {

SUNDAY, MONDAY, TUESDAY, WEDNESDAY, THURSDAY, FRIDAY, SATURDAY

}

public static void main(String[] args) {

for (Day d : Day.values()) {

System.out.println(d);

}

}

}

2. Use enum in switch case

public class EnumSwitch {

enum Day {

MONDAY, TUESDAY, WEDNESDAY, THURSDAY, FRIDAY, SATURDAY, SUNDAY

}

public static void main(String[] args) {

Day today = Day.WEDNESDAY;

switch (today) {

case MONDAY -> System.out.println("Start of the week!");

case FRIDAY -> System.out.println("Almost weekend!");

case SUNDAY -> System.out.println("Rest day!");

default -> System.out.println("Midweek day");

}

}

}

3. Iterate over enum values

public class EnumIteration {

enum Season {

SPRING, SUMMER, FALL, WINTER

}

public static void main(String[] args) {

for (Season s : Season.values()) {

System.out.println(s);

}

}

}

4. Assign properties to enum constants

public class EnumWithProperties {

enum Planet {

MERCURY(3.303e+23, 2.4397e6),

VENUS(4.869e+24, 6.0518e6),

EARTH(5.976e+24, 6.37814e6);

private final double mass;

private final double radius;

Planet(double mass, double radius) {

this.mass = mass;

this.radius = radius;

}

public double surfaceGravity() {

final double G = 6.67300E-11;

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

}

public double getMass() { return mass; }

public double getRadius() { return radius; }

}

public static void main(String[] args) {

for (Planet p : Planet.values()) {

System.out.printf("%s: mass = %.2e, radius = %.2f%n", p, p.getMass(),

p.getRadius());

}

}

}

5. Create an enum to represent traffic light states

public class TrafficLightEnum {

enum TrafficLight {

RED, YELLOW, GREEN

}

public static void main(String[] args) {

TrafficLight signal = TrafficLight.RED;

switch (signal) {

case RED -> System.out.println("Stop");

case YELLOW -> System.out.println("Get Ready");

case GREEN -> System.out.println("Go");

}

}

}