June 30, 2022

Question 1

import java.util.Arrays;

// Base class for Student

public class Student {

    protected int roll\_no;

    protected String name;

    public Student() {

    }

    public Student(int roll\_no, String name) {

        this.roll\_no = roll\_no;

        this.name = name;

    }

    public int getRoll\_no() {

        return roll\_no;

    }

    public void setRoll\_no(int roll\_no) {

        this.roll\_no = roll\_no;

    }

    public String getName() {

        return name;

    }

    public void setName(String name) {

        this.name = name;

    }

    public String toString() {

        return "Student [roll\_no = " + roll\_no + "\n name = " + name + "]";

    }

}

// Derived class from Student

class Marks extends Student {

    protected int marks[] = new int[5];

    protected double percentage = 0.0;

    public Marks() {

    }

    public Marks(int roll\_no, String name, int marks[]) {

        super(roll\_no, name);

        this.marks = marks;

    }

    public int[] getMarks() {

        return marks;

    }

    public void setMarks(int marks[]) {

        this.marks = marks;

    }

    public double calculatePercentage() {

        double total = 0.0;

        for (int i = 0; i < marks.length; i++) {

            total += marks[i];

        }

        percentage = total / marks.length;

        return percentage;

    }

    public String toString() {

        return "Marks [\nroll\_no = " + roll\_no + "\nname = " + name + ",\nmarks = " + Arrays.toString(marks)

                + "\npercentage = " + calculatePercentage() + "%\n]";

    }

    public static void main(String[] args) {

        Marks marks = new Marks(1, "Ezra", new int[] { 100, 90, 80, 70, 60 });

        System.out.println(marks);

    }

}

Question 2

public class CLA {

    public static void main(String[] args) {

        // Prints out the command line arguments passed to the Java program

        for (String arg : args) {

            System.out.println(arg);

        }

    }

}

A command-line argument is an information that directly follows the program's name on the command line when it is executed.

Steps to execute program

1. Run javac CLA.java to compile the java file to get a .class file.
2. Run java CLA and type in the string of arguments, for eg. (This is a command line argument), which returns:

This

is

a

command

line

argument