**Question 1:Array Access**

**<<<<<<<<<ANSWERS>>>>>>>>>>>>>>>>>>**

int [ ] numbers = { 25, 37, 46, 18, 79, 69, 55};

A.What is the output of the following lines?

int[] numbers = {25, 37, 46, 18, 79, 69, 55};

System.out.println(numbers[4]);

**ANS:**

**This will print the value at index 4 (which is the 5th element) of the array named `numbers`**

**79**

B.Calculate x and print it

int[] numbers = {25, 37, 46, 18, 79, 69, 55};

int x = numbers[1] + 2 \* numbers[3];

System.out.println(x);

**ANS:  
This code calculates the value of `x` as described then prints it**

**73**

C.Calculate x and print it  
int[] numbers = {25, 37, 46, 18, 79, 69, 55};

int x = ++numbers[5];

System.out.println(x);

**ANS:  
This code calculates the value of `x` by incrementing the value at index5 and then prints it**

**70**

**Question 2:InventoryItem Class**

**<<<<<<<<<ANSWERS>>>>>>>>>>>>>>>>>>**

The following is the driver class contains the main(). There are 4 groups of the code A, B, C, D

1. Explain what does each group do for the array units?
2. If there is any group having the code not correct, explain the error then provide the correct code.

**A.**units[0].setItemID(“A123123”);

units[0].setUnitPrice(28.19f);

units[0].setUnitCount(203);

**→This code sets values for units[0] which represent item ID,unit price and unit count**

**B.** units[1].setUnitCount(335);

System.out.println(units.getUnitCount]2]( ));  
**→This code modifies the unit count for units[1]**

**C.**

units.setUnitCount[2] (214);

System.out.println(units.getUnitCount]2]( )

**→There’s an error in this code. I attempts to set the unit count for units[2] ,but it should be units[1]  
CORRECTED CODE:**

**units[1].setUnitCount(214);**

**D.**

System.out.printlin(units[0]);

}

**→There’s an error in this code. It attempts to print the contents of units[0] but it should be units[1].**

**CORRECTED CODE:**

**System.out.println(units[1]);**

**Question 3:Writing To a File**

**<<<<<<<<<ANSWERS>>>>>>>>>>>>>>>>>>**

**package Dipesh;**

**import java.io.FileWriter;**

**import java.io.IOException;**

**public class WriteToFileExample {**

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

**int[] arrays = { 39, 58, 76, 112, 49, 88, 75, 33, 34, 50 };**

**try (FileWriter writer = new FileWriter("data.txt")) {**

**for (int index = 0; index < arrays.length; index++) {**

**String line = "Element at the index " + index + " in the arrays is " + arrays[index] + "\n";**

**writer.write(line);**

**}**

**} catch (IOException e) {**

**e.printStackTrace();**

**}**

**}**

**}**

**Question 4:Class Definition**

**<<<<<<<<<ANSWERS>>>>>>>>>>>>>>>>>>**

**package Dipesh;**

**public class MorningExerciseMonitor\_GAUTAM {**

**private String name;**

**private float[] distances;**

**// No-argument constructor**

**public MorningExerciseMonitor\_GAUTAM() {**

**name = "";**

**distances = new float[7];**

**}**

**// Parameterized constructor**

**public MorningExerciseMonitor\_GAUTAM(String name, float[] distances) {**

**this.name = name;**

**this.distances = distances;**

**}**

**@Override**

**public String toString() {**

**StringBuilder sb = new StringBuilder();**

**sb.append("PERSON\n");**

**sb.append("Name = ").append(name).append("\n");**

**sb.append("Week Exercise Distance = ");**

**for (float distance : distances) {**

**sb.append(distance).append(", ");**

**}**

**sb.delete(sb.length() - 2, sb.length()); // Remove the trailing comma and space**

**return sb.toString();**

**}**

**}**