**Assignment-2**

**1.Write a java program for Matrix Addition.**

**A.**

public class Add\_Two\_Matrices

{

public static void main(String[] args) {

int[][] a = { { 1, 2, 3, 4 }, { 5, 6, 7, 8 }, { 9, 10, 11, 12 },{ 13, 14, 15, 16} };

int[][] b = { { 15, 22, 26, 28 }, { 32, 48, 37, 21 }, { 17, 39, 46, 54 },{ 23, 48, 58, 14} };

for(int i = 0; i < 4; i++){

for(int j = 0; j < 4; j++){

System.out.print(a[i][j]+b[i][j] + " ");

}

System.out.println();

}

}

}

**Output :**

16 24 29 32

37 54 44 29

26 49 57 66

36 62 73 30

**2. Write a java program for Matrix Multiplication.**

**A.**

public class Mutiply\_Two\_Matrices

{

public static void main(String[] args) {

int[][] a = { { 1, 2, 3, 4 }, { 5, 6, 7, 8 }, { 9, 10, 11, 12 },{ 13, 14, 15, 16} };

int[][] b = { { 12, 15, 18, 19 }, { 14, 13, 11, 10 }, { 8, 6, 4, 9 },{ 3, 2, 5, 1} };

for(int i = 0; i < 4; i++){

for(int j = 0; j < 4; j++){

System.out.print(a[i][j]\*b[i][j] + " ");

}

System.out.println();

}

}

}

**Output :**

12 30 54 76

70 78 77 80

72 60 44 108

1. 28 75 16

**3.Write a java program to demonstrate method overloading.**

**A.**

public class Method\_Overloading {

static int Add(int a, int b) {

return a+b;

}

static double Add(double a, double b) {

return a + b;

}

public static void main(String[] args) {

int myNum1 = Add(32, 22);

double myNum2 = Add(8.25, 11.50 );

System.out.println(myNum1);

System.out.println(myNum2);

}

}

**Output:**

54

19.75

**4.** **Write a java program to create a class Point with two data members x & y. Include all constructors and display().**

**A.**

**5. Write a java program using static method.**

**A.**

class Employee{

int empID;

String name;

static String Company = "WIPRO";

//static method to change the value of static variable

static void change(){

Company = "TCS"; }

//constructor to initialize the variable

Employee(int r, String n){

empID = r;

name = n;

}

//method to display values

void display(){System.out.println(empID+" "+name+" "+Company);}

}

//Test class to create and display the values of object

public class TestStaticMethod{

public static void main(String args[]){

Employee.change();//calling change method

//creating objects

Employee e1 = new Employee(101,"Ramesh");

Employee e2 = new Employee(102,"Suresh");

Employee e3 = new Employee(103,"Rajesh");

//calling display method

e1.display();

e2.display();

e3.display();

}

}

**Output:**

101 Ramesh TCS

102 Suresh TCS

103 Rajesh TCS

**Questions:**

**1.What is conditional statement?**

**A.** A **conditional statement** is a statement that computer programming language used to decide which code has to be run when the true condition is met or which code has not to be run when the true condition is not met.

Java has the following conditional statements:

* Use if to specify a block of code to be executed, if a specified condition is true
* Use else to specify a block of code to be executed, if the same condition is false
* Use else if to specify a new condition to test, if the first condition is false
* Use switch to specify many alternative blocks of code to be executed.

2. **Write the syntax of switch case statement.**

**A.** the switch statement is used to select one of many code blocks to be executed.

**Syntax:**

Switch(expression) {

case a:

//code block

break;

case b:

//code block

Break;

default:

//code block

}