**Exp.No:6. Write Programs in Java to add two matrices**

**Source Code:**

**import** java.util.Scanner;

**public** **class** Add\_M {

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

{

Scanner s = **new** Scanner(System.***in***);

System.***out***.print("Enter number of rows: ");

**int** rows = s.nextInt();

System.***out***.print("Enter number of columns: ");

**int** columns = s.nextInt();

**int**[][] a = **new** **int**[rows][columns];

**int**[][] b = **new** **int**[rows][columns];

System.***out***.println("Enter the first matrix");

**for** (**int** i = 0; i < rows; i++)

{

**for** (**int** j = 0; j < columns; j++)

{

a[i][j] = s.nextInt();

}

}

System.***out***.println("Enter the second matrix"); **for**

(**int** i = 0; i < rows; i++) {

**for** (**int** j = 0; j < columns; j++)

{

b[i][j] = s.nextInt();

}

}

**int**[][] c = **new** **int**[rows][columns];

**for** (**int** i = 0; i < rows; i++) {

**for** (**int** j = 0; j < columns; j++) { c[i][j] = a[i][j] + b[i][j];

}

}

System.***out***.println("The sum of the two matrices is");

**for** (**int** i = 0; i < rows; i++)

{

**for** (**int** j = 0; j < columns; j++)

{

System.***out***.print(c[i][j] + " ");

}

System.***out***.println();

}

}

}

**Output:**

Enter number of rows: 3

Enter number of columns: 3

Enter the first matrix

1

2

3

4

5

6

1

2

3

Enter the second matrix

1

2

3

1

2

3

1

2

3

The sum of the two matrices is

2 4 6

5 7 9

2 4 6

**Exp.No:7. Write a program in Java to create a player class. Inherit the classes Cricket\_player, Football\_player and Hockey\_player from player class.**

**Source Code:**

**import** java.util.Scanner; **class** Player{

String name; **int** age;

String gameName;

**int** noOfGamesPlayed; String address;

String type;

Scanner in=**new** Scanner(System.***in***);

**void** getDetails()

{

System.***out***.println("Enter the details Name,Age,Address,Name of Game,No of Games Played and Type");

name=in.next(); age=in.nextInt(); address=in.next(); gameName=in.next(); noOfGamesPlayed=in.nextInt(); type=in.next();

}

**void** display()

{

System.***out***.println("Name:"+name+"\nAge"+age+"\nGame Name"+gameName+"\nTotal Matches:"+noOfGamesPlayed+"\nAddress:"+address+"\nInternational or National:"+type);

}

}

**class** Cricket\_Player **extends** Player{ **int** totalRuns;

**int** totalWickets;

**void** getDetails()

{

**super**.getDetails();

System.***out***.println("Enter the total runs and wickets:"); totalRuns=in.nextInt();

totalWickets=in.nextInt();

}

**void** display()

{

**super**.display();

System.***out***.println("Total Runs:"+totalRuns+"Total Wickets"+totalRuns);

}

}

**class** Football\_Player **extends** Player

{

**int** noOfGoals; **void** getDetails()

{

**super**.getDetails(); System.***out***.println("Enter the no of Goals");

noOfGoals=in.nextInt();

}

**void** display()

{

**super**.display();

System.***out***.println("Total Goals:"+noOfGoals);

}

}

**class** Hockey\_Player **extends** Player

{

**int** noOfGoals; **void** getDetails()

{

**super**.getDetails(); System.***out***.println("Enter the no of Goals");

noOfGoals=in.nextInt();

}

**void** display()

{

**super**.display();

System.***out***.println("Total Goals:"+noOfGoals);

}

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

{

Cricket\_Player cp=**new** Cricket\_Player(); cp.getDetails();

cp.display();

Football\_Player fp=**new** Football\_Player(); fp.getDetails();

fp.display();

Hockey\_Player hp=**new** Hockey\_Player(); hp.getDetails();

hp.display();

}

}

**Output:**

Enter the details Name,Age,Address,Name of Game,No of Games Played and Type

Rahil

22

STES

Cricket

5

Internationa

Enter the total runs and wickets:

99

3

Name:Rahil

Age22

Game NameCricket

Total Matches:5

Address:STES

International or National:Internationa

Total Runs:99 Total Wickets=3