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Course: Java Programming
Course Code: CSE1007
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Slot: A2+TA2

Program Code:

```
package classwork;

import java.util.Scanner;

public class ClassWork {
    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.println("How many rows do you want in first matrices: ");
        int a;
        a = sc.nextInt();
        int mat1[][] = new int[a][a];
        int mat2[][] = new int[a][a];
        int add1[][] = new int[a][a];

        int i,j;

        System.out.println("Enter values of matrix 1");
        for (i=0;i<a;i++)
        {
            for (j=0;j<a;j++)
            {
                mat1[i][j] = sc.nextInt();
            }
        }
        System.out.println("Enter values of matrix 2");

        for (i=0;i<a;i++)
        {
            for (j=0;j<a;j++)
            {
                mat2[i][j] = sc.nextInt();
            }
        }

        for (i=0;i<a;i++)
        {
            for(j=0;j<a;j++)
            {
                add1[i][j]=mat1[i][j]+mat2[i][j];
            }
        }

        System.out.println("Sum of first two arrays:");
```

```
for (i=0;i<a;i++)
{
for (j=0;j<a;j++)
{
System.out.print(add1[i][j]+" ");
}
System.out.print("\n");
}
```

```
System.out.println("How many rows for second matrices:");
a=sc.nextInt();
```

```
int mat1_jagged[][] = new int[a][];
int mat2_jagged[][] = new int[a][];
int add2[][] = new int[a][];
int b;
```

```
for (i=0;i<a;i++)
{
System.out.println("How many columns in row "+(i+1)+":");
b=sc.nextInt();
mat1_jagged[i] = new int[b];
mat2_jagged[i] = new int[b];
add2[i] = new int[b];
}
```

```
System.out.println("Enter elements of first jagged matrix:");
```

```
for (i=0;i<mat1_jagged.length;i++)
{
for(j=0;j<mat1_jagged[i].length;j++)
{
mat1_jagged[i][j] = sc.nextInt();
}
}
```

```
System.out.println("Enter elements of second jagged matrix:");
```

```
for (i=0;i<mat2_jagged.length;i++)
{
for(j=0;j<mat2_jagged[i].length;j++)
{
mat2_jagged[i][j] = sc.nextInt();
}
}
```

```
for (i=0;i<mat1_jagged.length;i++)
{
for (j=0;j<mat1_jagged[i].length;j++)
{
add2[i][j] = mat1_jagged[i][j]+mat2_jagged[i][j];
}
}
```

```
System.out.println("Sum of second two arrays:");
```

```
for (i=0;i<add2.length;i++)  
{  
for (j=0;j<add2[i].length;j++)  
{  
System.out.print(add2[i][j]+" ");  
}  
System.out.print("\n");  
}  
  
}  
}
```

Output:

```
siddharth@siddharth-hp-pavilion-x360:~/Documents/java$ javac classwork/ClassWork.java  
siddharth@siddharth-hp-pavilion-x360:~/Documents/java$ java classwork/ClassWork  
How many rows do you want in first matrices:  
2  
Enter values of matrix 1  
1  
2  
3  
4  
Enter values of matrix 2  
5  
6  
7  
8  
Sum of first two arrays:  
6 8  
10 12  
How many rows for second matrices:  
2  
How many columns in row 1:  
3  
How many columns in row 2:  
2  
Enter elements of first jagged matrix:  
1  
2  
3  
4  
5  
Enter elements of second jagged matrix:  
1  
2  
3  
4  
5  
Sum of second two arrays:  
2 4 6  
8 10  
siddharth@siddharth-hp-pavilion-x360:~/Documents/java$
```