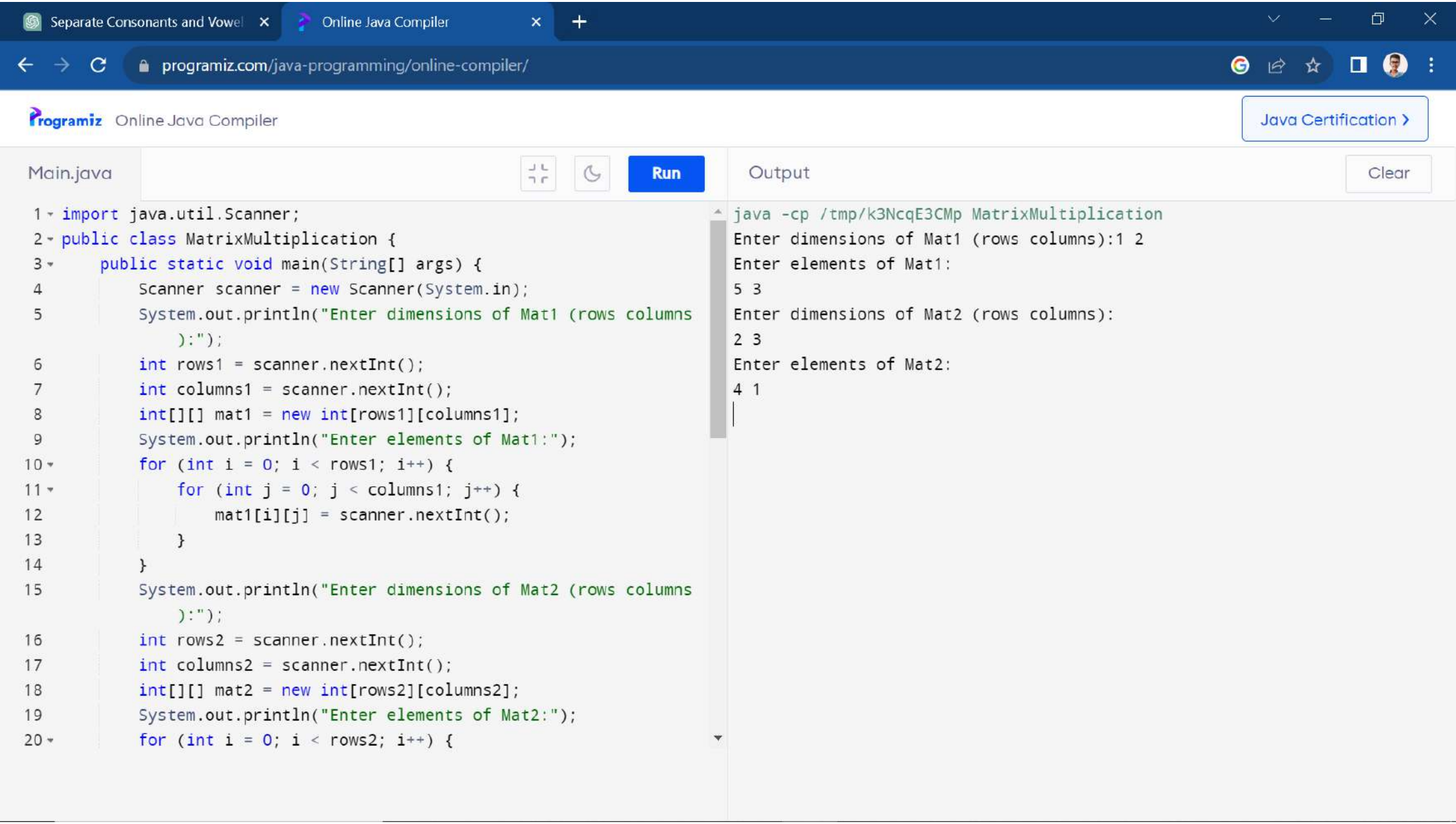
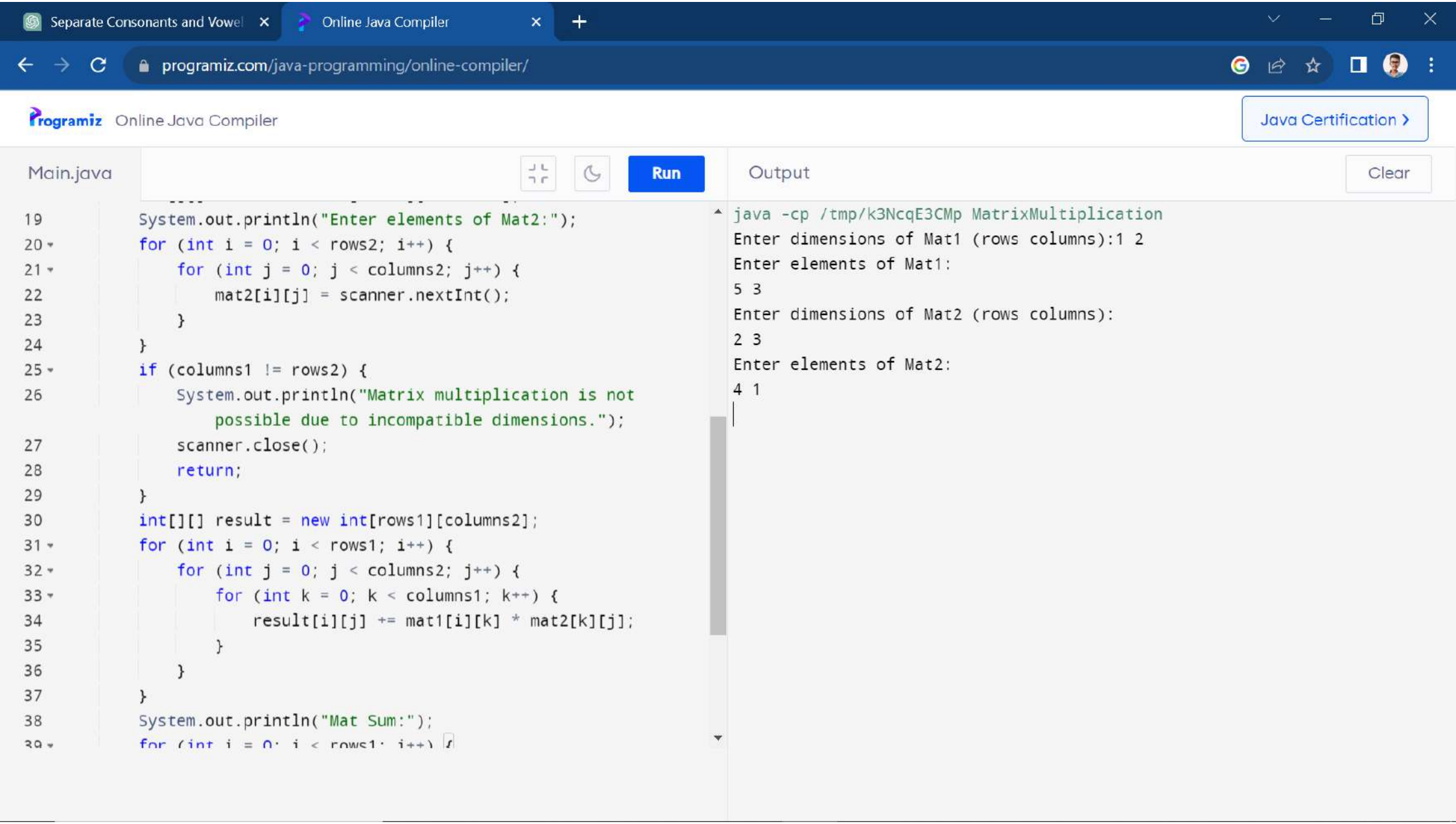
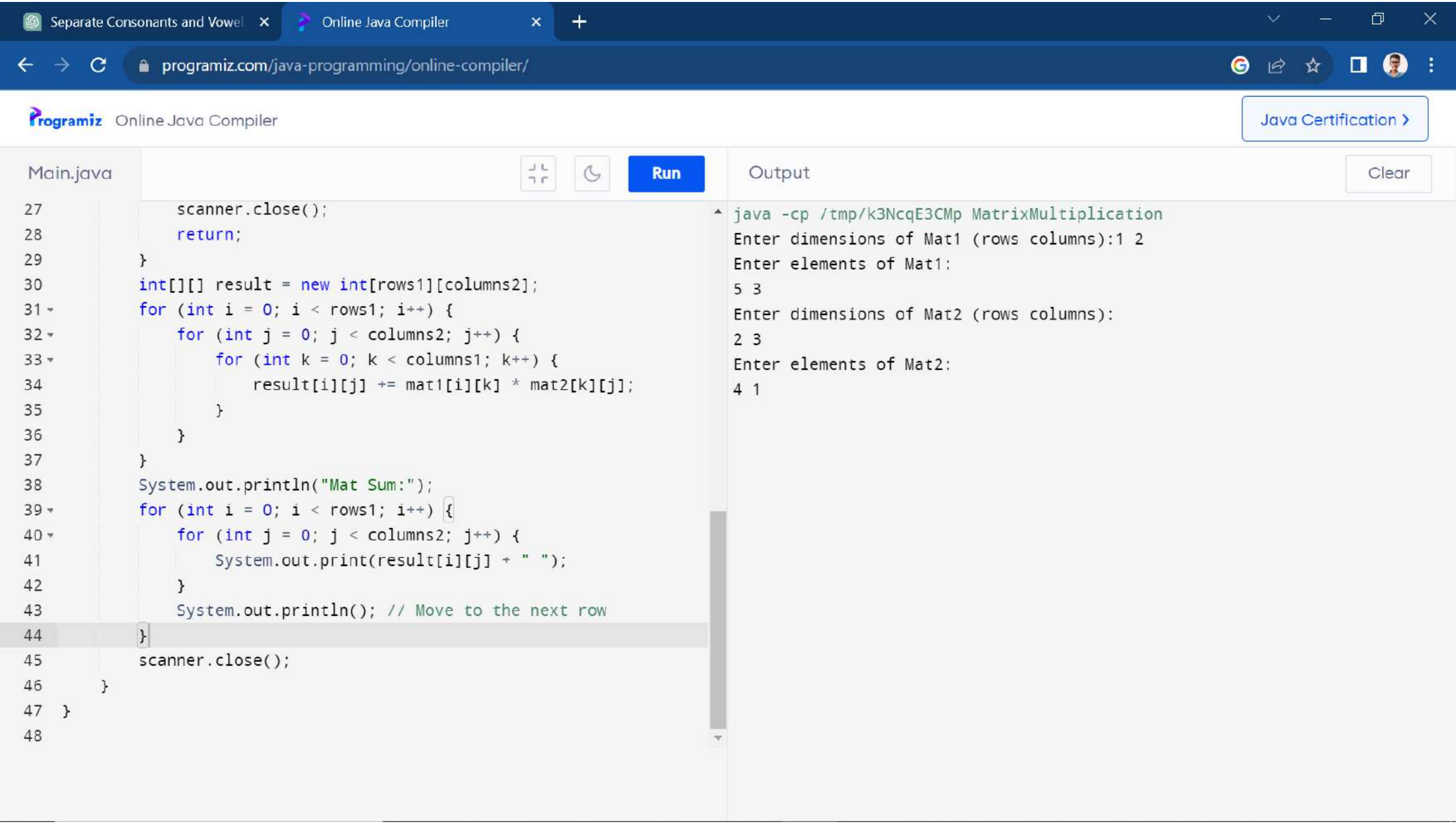

Separate Consonants and Vowel
Online Java Compiler
programiz.com/java-programming/online-compiler/
Programiz Online Java Compiler
Java Certification ›
Main.java
Run
Output
Clear
1 import java.util.Scanner;
2 public class MatrixMultiplication {
3 public static void main(String[] args) {
4 Scanner scanner = new Scanner(System.in);
5 System.out.println("Enter dimensions of Mat1 (rows columns):");
6 int rows1 = scanner.nextInt();
7 int columns1 = scanner.nextInt();
8 int[][] mat1 = new int[rows1][columns1];
9 System.out.println("Enter elements of Mat1:");
10 for (int i = 0; i < rows1; i++) {
11 for (int j = 0; j < columns1; j++) {
12 mat1[i][j] = scanner.nextInt();
13 }
14 }
15 System.out.println("Enter dimensions of Mat2 (rows columns):");
16 int rows2 = scanner.nextInt();
17 int columns2 = scanner.nextInt();
18 int[][] mat2 = new int[rows2][columns2];
19 System.out.println("Enter elements of Mat2:");
20 for (int i = 0; i < rows2; i++) {
java -cp /tmp/k3NcqE3CMp MatrixMultiplication
Enter dimensions of Mat1 (rows columns):1 2
Enter elements of Mat1:
5 3
Enter dimensions of Mat2 (rows columns):
2 3
Enter elements of Mat2:
4 1


Separate Consonants and Vowel
Online Java Compiler
programiz.com/java-programming/online-compiler/
Programiz Online Java Compiler
Java Certification
Main.java
Run
Output
Clear
System.out.println("Enter elements of Mat2:");
for (int i = 0; i < rows2; i++) {
for (int j = 0; j < columns2; j++) {
mat2[i][j] = scanner.nextInt();
}
}
if (columns1 != rows2) {
System.out.println("Matrix multiplication is not possible due to incompatible dimensions.");
scanner.close();
return;
}
int[][] result = new int[rows1][columns2];
for (int i = 0; i < rows1; i++) {
for (int j = 0; j < columns2; j++) {
for (int k = 0; k < columns1; k++) {
result[i][j] += mat1[i][k] * mat2[k][j];
}
}
}
System.out.println("Mat Sum:");
java -cp /tmp/k3NcqE3CMp MatrixMultiplication
Enter dimensions of Mat1 (rows columns):1 2
Enter elements of Mat1:
5 3
Enter dimensions of Mat2 (rows columns):
2 3
Enter elements of Mat2:
4 1


Separate Consonants and Vowel
Online Java Compiler
programiz.com/java-programming/online-compiler/
Programiz Online Java Compiler
Java Certification
Main.java
Run
Output
Clear
scanner.close();
return;
}
int[][] result = new int[rows1][columns2];
for (int i = 0; i < rows1; i++) {
for (int j = 0; j < columns2; j++) {
for (int k = 0; k < columns1; k++) {
result[i][j] += mat1[i][k] * mat2[k][j];
}
}
}
System.out.println("Mat Sum:");
for (int i = 0; i < rows1; i++) {
for (int j = 0; j < columns2; j++) {
System.out.print(result[i][j] + " ");
}
System.out.println(); // Move to the next row
}
scanner.close();
}
}
java -cp /tmp/k3NcqE3CMp MatrixMultiplication
Enter dimensions of Mat1 (rows columns):1 2
Enter elements of Mat1:
5 3
Enter dimensions of Mat2 (rows columns):
2 3
Enter elements of Mat2:
4 1