

# Software Engineering: CS 305

ASHISH KUMAR BHOI

160010017

## Input And output

```
View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
HungarianAlgorithm [~/IdeaProjects/HungarianAlgorithm] - .../src/test/java/in/a
HungarianAlgorithm > src > test > java > in > ac > iitdh > HungarianTest

HungarianTest.java x Main.java x
HungarianTest.java
46
47 @Test
48 public void Test3() {
49     int[][] matrixInput = {
50         { 68, 38, 9, 60, 46, 58, 83, 87, 84, 20 },
51         { 53, 4, 16, 4, 44, 72, 34, 97, 69, 5 },
52         { 21, 2, 45, 55, 34, 15, 2, 13, 12, 51 },
53         { 8, 93, 22, 66, 25, 9, 59, 71, 12, 95 },
54         { 42, 35, 33, 23, 3, 8, 8, 50, 23, 95 },
55         { 74, 37, 15, 21, 36, 49, 80, 55, 79, 53 },
56         { 21, 97, 55, 12, 25, 67, 10, 65, 2, 49 },
57         { 8, 48, 1, 92, 8, 76, 41, 32, 87, 36 },
58         { 32, 73, 71, 47, 94, 92, 16, 97, 5, 4 },
59         { 58, 37, 54, 52, 84, 16, 34, 5, 72, 26 }
60     };
61
62     int[] Answer = {2, 1, 6, 5, 4, 3, 8, 0, 9, 7};
63
64     Hungarian hungarian = new Hungarian(matrixInput);
65
66     Hung
67
HungarianTest > Test20

Main x
/usr/lib/jvm/java-1.11.0-openjdk-amd64/bin/java -javaagent:/home/ashish/.local/share/JetBrains/Toolbox/a
Total time: 1ms

Row1 => Col3 (9)
Row2 => Col2 (4)
Row3 => Col7 (2)
Row4 => Col6 (9)
Row5 => Col5 (3)
Row6 => Col4 (21)
Row7 => Col9 (2)
Row8 => Col1 (8)
Row9 => Col10 (4)
Row10 => Col8 (5)

Total: 67

inal Build Messages Run TODO
Completed successfully in 2 s 173 ms (10 minutes ago)
```

## All Test Cases

1.

```
{2500, 4000, 3500},  
{4000, 6000, 3500},  
{2000, 4000, 2500}
```

Ans.

```
{2500, 4000, 3500},  
{4000, 6000, 3500},  
{2000, 4000, 2500}
```

2.

```
{1500, 4000, 4500},  
{2000, 6000, 3500},  
{2000, 4000, 2500}
```

Ans.

```
{1500, 4000, 4500},  
{2000, 6000, 3500},  
{2000, 4000, 2500}
```

3.

```
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help  
HungarianAlgorithm [~/IdeaProjects/HungarianAlgorithm] - .../src/test/jav  
HungarianAlgorithm - src - test - java - in - ac - itdh - HungarianTest  
Project  
HungarianAlgorithm - /IdeaProjects/HungarianAlgorithm  
  .idea  
  src  
    main  
      java  
        in.ac.itdh  
          Hungarian  
          Main  
    test  
      java  
        in.ac.itdh  
          HungarianTest  
  target  
    HungarianAlgorithm.iml  
    pom.xml  
  External Libraries  
  Scratches and Consoles  
HungarianTest.java  
Main.java  
HungarianTest.java  
46  
47  
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60  
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62  
@Test  
public void Test3() {  
    int[][] matrixInput = {  
        { 68, 38, 9, 60, 46, 58, 83, 87, 84, 20 },  
        { 53, 4, 16, 4, 44, 72, 34, 97, 69, 5 },  
        { 21, 2, 45, 55, 34, 15, 2, 13, 12, 51 },  
        { 8, 93, 22, 66, 25, 9, 59, 71, 12, 95 },  
        { 42, 35, 33, 23, 3, 8, 8, 50, 23, 95 },  
        { 74, 37, 15, 21, 36, 49, 80, 55, 79, 53 },  
        { 21, 97, 55, 12, 25, 67, 10, 65, 2, 49 },  
        { 8, 48, 1, 92, 8, 76, 41, 32, 87, 36 },  
        { 32, 73, 71, 47, 94, 92, 16, 97, 5, 4 },  
        { 58, 37, 54, 52, 84, 16, 34, 5, 72, 26 }  
    };  
  
    int[] Answer = {2, 1, 6, 5, 4, 3, 8, 0, 9, 7};  
};  
HungarianTest - Test20  
Run: HungarianTest  
Tests passed: 3 of 3 tests - 4ms  
/usr/lib/jvm/java-1.11.0-openjdk-amd64/bin/java -ea -Didea.test.cy  
Process finished with exit code 0
```

