

Output for the code:

1. Draw 4×4 tableau containing the elements {9,16,3,2,4,8,5,14,12}

```
<terminated> YoungTableau [Java Application] D:\JDK\bin\javaw.exe (Oct 2, 2018, 12:45:37 AM)
Enter number of rows, m: 4
Enter number of columns, n: 4
Enter comma seperated values for tableau:
9,16,3,2,4,8,5,14,12
Enter 1 to display tableau.
Enter 2 for extracting minimum.
Enter 3 to insert a element in Young Tableau.
Enter 4 to get a sorted sequence.
Enter 5 to find out whether the number is present in the stored in m*n tableau.
1
Tableau is as below
2 3 5 14
4 8 9 16
12 - - -
- - - -
,
```


2. Extract Minimum

Code first displays the output Tableau for the given values.


Then it extracts the minimum as per the question of the assignment and displays the new tableau.

```
<terminated> YoungTableau [Java Application] D:\JDK\bin\javaw.exe (Oct 2, 2018, 12:49:13 AM)
Enter number of rows, m: 4
Enter number of columns, n: 4
Enter comma seperated values for tableau:
9,16,3,2,4,8,5,14,12
Enter 1 to display tableau.
Enter 2 for extracting minimum.
Enter 3 to insert a element in Young Tableau.
Enter 4 to get a sorted sequence.
Enter 5 to find out whether the number is present in the stored in m*n tableau.
2
Tableau is as below
2 3 5 14
4 8 9 16
12 - - -
- - - -
Extracted minimum value: 2
3 5 9 14
4 8 16 -
12 - - -
- - - -
,
```

3. Insert an element in Young tableau.


```
Console 
<terminated> YoungTableau [Java Application] D:\JDK\bin\javaw.exe (Oct 2, 2018, 12:53:11 AM)
Enter number of rows, m: 4
Enter number of columns, n: 4
Enter comma seperated values for tableau:
9,16,3,2,4,8,5,14,12
Enter 1 to display tableau.
Enter 2 for extracting minimum.
Enter 3 to insert a element in Young Tableau.
Enter 4 to get a sorted sequence.
Enter 5 to find out whether the number is present in the stored in m*n tableau.
3
Tableau is as below
2 3 5 14
4 8 9 16
12 - - -
- - - -
Enter the number to be inserted
10
Tableau after inserting new element is as below
2 3 5 14
4 8 9 16
10 12 - -
- - - -
```

4. Print the sorted sequence


```
Console 
<terminated> YoungTableau [Java Application] D:\JDK\bin\javaw.exe (Oct 2, 2018, 12:54:25 AM)
Enter number of rows, m: 4
Enter number of columns, n: 4
Enter comma seperated values for tableau:
9,16,3,2,4,8,5,14,12
Enter 1 to display tableau.
Enter 2 for extracting minimum.
Enter 3 to insert a element in Young Tableau.
Enter 4 to get a sorted sequence.
Enter 5 to find out whether the number is present in the stored in m*n tableau.
4
Tableau is as below
2 3 5 14
4 8 9 16
12 - - -
- - - -
Sorted sequence:2 3 4 5 8 9 12 14 16 |
```

5. Search an element in the tableau

Good case

```
Console 
<terminated> YoungTableau [Java Application] D:\JDK\bin\javaw.exe (Oct 2, 2018, 12:59:24 AM)
Enter number of rows, m: 4
Enter number of columns, n: 4
Enter comma seperated values for tableau:
9,16,3,2,4,8,5,14,12
Enter 1 to display tableau.
Enter 2 for extracting minimum.
Enter 3 to insert a element in Young Tableau.
Enter 4 to get a sorted sequence.
Enter 5 to find out whether the number is present in the stored in m*n tableau.
5
Enter the number to determine:
5
true
```

Bad Case

```
Console 
<terminated> YoungTableau [Java Application] D:\JDK\bin\javaw.exe (Oct 2, 2018, 1:01:17 AM)
Enter number of rows, m: 4
Enter number of columns, n: 4
Enter comma seperated values for tableau:
9,16,3,2,4,8,5,14,12
Enter 1 to display tableau.
Enter 2 for extracting minimum.
Enter 3 to insert a element in Young Tableau.
Enter 4 to get a sorted sequence.
Enter 5 to find out whether the number is present in the stored in m*n tableau.
5
Enter the number to determine:
1
false
```