

```
"E:\Program Files\Java\jdk-17\bin\java.exe" "-javaagent:E:\Program Files\
JetBrains\IntelliJ IDEA 2021.2\lib\idea_rt.jar=51459:E:\Program Files\
JetBrains\IntelliJ IDEA 2021.2\bin" -Dfile.encoding=UTF-8 -classpath E:\
my_projects\It-Step\java\2022_03_16\out\production\2022_03_23 org.dng.
dz53_6
```

Please, enter the dimension of array

5

the original array is:

```
{ 2 13 44 49 37 }
```

```
{ 10 76 1 78 1 }
```

```
{ 25 0 25 20 87 }
```

```
{ 29 92 74 19 25 }
```

```
{ 22 58 30 60 66 }
```

min value of array calculated by the fori-meth is 0

Time for calculate min value of 2-dimension array is :14 ms

min value of array calculated by the Stream-meth is 0

Time for calculate min value of 2-dimension array using stream is :3 ms

max value of array calculated by the fori-meth is 92

Time for calculate max value of 2-dimension array is :0 ms

max value of array calculated by the Stream-meth is 92

Time for calculate max value of 2-dimension array using stream is :2 ms

duplicated values and its indexes are [duplicated_value, line, column]:

```
[1, 2, 3]
```

```
[1, 2, 5]
```

```
[25, 3, 1]
```

```
[25, 3, 3]
```

```
[25, 4, 5]
```

Time for search duplicated values in 2-dimension array is :0 ms

Search a duplicated values in 2-dimension array using HashMap/someObjects/stream...

The number of duplicated values is 2

Value 1 occurs 2 time(s)

line = 2 column = 3

line = 2 column = 5

Value 25 occurs 3 time(s)

line = 3 column = 1

line = 3 column = 3

line = 4 column = 5

Time for search duplicated values in 2-dimension array using HashMap/someObjects/stream is :27 ms

Process finished with exit code 0