

Part 1: Loops

Pie Approximation: Used linear increase of iterations instead of a fixed (batch-size like) count of iterations.

```
<terminated> Leibniz [Java Application] D:\Program_Files\Java\jdk1.8.0_202\bin\javaw.exe  
π is estimated as 3.141603 after 100001 iterations
```

Part 2: 2D Arrays

1. Printing Matrix
2. Spiral Matrix Print from Leetcode

```
<terminated> SpiralMatrix [Java Application] D:\Program_Files\Java\jdk1.8.0_202\bin\javaw.exe (Sep 18, 2025, 11  
1 2 3 4  
5 6 7 8  
9 10 11 12  
13 14 15 16  
17 18 19 20  
  
Spiral order: 1 2 3 4 8 12 16 20 19 18 17 13 9 5 6 7 11 15 14 10
```

Part 3: Strings

1. Acronym for string

```
Input : as soon as possible  
Acronym: ASAP  
  
Input : The quick brown fox jumps over the lazy dog  
Acronym: TQBFJOTLD
```

2. Mirror String Generator

Reverse and paste

```
<terminated> MirrorString [Java Application] D:\Program_  
Mirror of "hello" is "helloolleh"  
Mirror of "java" is "javaavaJ"  
Mirror of "a" is "aa"
```