

## List no 5

1. Write a function `determinantMatrixSarrusMethod` that takes a matrix (represented as a two-dimensional array containing integers) as an argument. The function should check if the matrix is 3x3. If not, the function returns an error; otherwise, it calculates the determinant.

Source: [[https://www.algebrapracticeproblems.com/rule-of-sarrus/?utm\\_content=cmp-true](https://www.algebrapracticeproblems.com/rule-of-sarrus/?utm_content=cmp-true)]([https://www.algebrapracticeproblems.com/rule-of-sarrus/?utm\\_content=cmp-true](https://www.algebrapracticeproblems.com/rule-of-sarrus/?utm_content=cmp-true))

2. Write `determinantOfMatrix4by4`, which similarly to the previous one, takes a two-dimensional array of integers as an argument. The function should allow the calculation of determinants of matrices using the formula described in the provided source.

Source: <https://www.algebrapracticeproblems.com/determinant-of-a-4x4-matrix/>

3. Write a matrix determinant function that, when provided with a 3x3 array as an argument, calculates its determinant using the Sarrus method. For a 4x4 matrix, it should utilize the method from task 2, and in all other cases, it should return an error.