

1. Write a Java method that repeatedly selects and removes a random entry from an array until the array holds no more entries.
2. Write a Java method that takes two three-dimensional integer arrays and adds them component wise.
3. Let A be an array of size $n \geq 2$ containing integers from 1 to $n-1$ inclusive, one of which is repeated. Describe an algorithm for finding the integer in A that is repeated.
4. Let B be an array of size $n \geq 6$ containing integers from 1 to $n-5$ inclusive, five of which are repeated. Describe an algorithm for finding the five integers in B that are repeated.
5. Write a Java method that takes two three-dimensional integer arrays and adds them component wise.
6. Write a Java program for a matrix class that can add and multiply arbitrary two dimensional arrays of integers.