

- 1) An array is defined to be a 235 array if the number of elements divisible by 2 plus the number of elements divisible by 3 plus the number of elements divisible by 5 plus the number of elements not divisible by 2, 3, or 5 is equal to the number of elements of the array. Write a method named `is235Array` that returns 1 if its array argument is a 235array, otherwise it returns 0.

The signature of the function is: `static int is235Array(int [] arr)`

- 2) Write a function named `sameNumberOfFactors` that takes two integer arguments and returns 1 if they have the same number of factors. If either argument is negative, return -1 Otherwise return 0.

The signature of the function is: `int sameNumberOfFactors(int n1, int n2)`

- 3) An array `arr` is called Funny if every 5 in the array is immediately followed by 13, otherwise it is not. write a function `isFunny` its signature is given below that takes an array of integers as input that checks whether the array is funny or not. The function must return 1 if the array is funny otherwise it returns 0.

The signature of the function is: `int isFunny(int[] arr);`

- 4) An array `arr` is called isNice if every element in the array is less than the sum of other elements in the array. write a function `isNice` its signature is given that takes an array of integers as input and checks whether the given array, `arr`, is Nice or not. The function returns 1,if the array is Nice otherwise it returns 0.

The signature of the function is: `int isNice(int[] arr);`

- 5) Write a function named `largestAdjacentSum` that iterates through an array computing the sum of adjacent elements and returning the largest such sum. You may assume that the array has at least 2 elements.

If you are writing in Java or C#, the function signature is `int largestAdjacentSum(int[] a)`
If you are writing in C or C++, the function signature is `int largestAdjacentSum(int a[], int len)` where `len` is the number of elements in `a`