

Assignment 4

Arrays and Strings

1. Write a program to count the number of 42's in a given array.
2. An array is called sorted in non-decreasing order, if there exists no pair of consecutive integers $A[i]$ and $A[i+1]$ such that $A[i] > A[i+1]$. Write a function that takes an array as argument and returns 1 if the given array is sorted and 0 otherwise.

```
int isSorted(int array[]) {  
    // write your code here.  
}
```

3. Write a function to find the largest number in an array passed as argument. Pass the given array as parameter to the function and this function should return the maximum number in the array.
4. Write a function to return the sum of the smallest and second smallest number present in the array. Pass the given array as parameter to the function and this function should return the sum of the smallest and second smallest number in the array.
5. A string is called a palindrome if it is same as the reversed string. For example "nitin" is a palindrome string. Write a function that takes a string as a parameter and return true if the string is a palindrome and false otherwise.
6. Print all the substrings of a string.
7. Given two very large numbers as string, write a function to return another string which represents the sum of the two numbers.

```
char * addNumbersAsString( char * number1, char * number2){  
    // write your code here  
}
```

addNumbersAsString("1234", "16") should return "1240"