Assignment

QUESTION 1: Write a program that prints the numbers from 1 to 50. For multiples of 3, print "Fizz" instead of the number, and for multiples of 5, print "Buzz". For numbers that are multiples of both 3 and 5, print "Fizz Buzz". (20)

Hint: Use for loop with if-else conditions.

Question 2: Write a function sumEvenOdd(arr) that takes an array of numbers and returns an object with the sum of even numbers and the sum of odd numbers in the array. Hint: Use a loop to iterate through the array, and if-else to check for even or odd numbers. (20)

QUESTION 3: A school conducts a mathematics competition for its students. The grading system for the competitors (20)

Is as follows:

Grade A+: Marks greater than 80

Grade A: Marks greater than 75

Grade B: Marks in the range 60 to 75

Grade C: Marks in the range 45to 60

Grade D: Marks less than 45

Q4: Question: Write a function palindrome (str) that takes a string and returns true if the string is a palindrome (reads the same forward and backward), otherwise false. Use loops and if-else conditions.

Hint: Compare characters from the beginning and end of the string, moving towards the center. (20)

Q5: Write a function filterAndTransform(arr) that inputs an array of numbers. The function should:

Filter out all negative numbers from the array. (20)

Double the remaining positive numbers.

Return the transformed array sorted in ascending order.

Hint:

Use the filter() method to remove negative numbers.

Use the map() method to double the positive numbers.

Use the sort() method to sort the array.