Programming problems:

1. Rates of apples and oranges in two shops are listed in the table below:

Draw a flowchart to read the number of apples and oranges to be purchased and guide the person to select either shop1 or shop2.

1. Read a number and check whether it is prime or not
2. Read a number and check whether the number is divisible by both m and n (m and n are to be read from the keyboard)
3. Read a four-digit number and add all the individual digits and print the sum.
4. Print all the numbers between m and n which are divisible by both a and b
5. Read a number and print the multiplication table for it
6. Exchange the values of two numbers m and n. Print the values before the exchange and after the exchange
7. Read a number and check whether it is an Armstrong number or not? List all the Armstrong numbers between 0 and 1000.
8. Read N numbers and print the second largest number in it without using an array.

Arrays:

1. Read an array of integers and perform the following:
   1. print the sum and the average
   2. arrange them in ascending order
   3. find the number of occurrences of a number n and print it
   4. check whether the array is in order or not
   5. create two different arrays, one having odd numbers and the other even numbers
2. Read a string of characters and perform the following:
   1. Reverse it and print
   2. Check whether it is a palindrome or not
   3. Count the number of vowels and consonants and to print them
3. Read two strings s1 and s2, check whether s1 contains s2 or not. If s1 contains s2, print the position of s2 in s1
4. Read a string and replace a given character with another character (Read the string and the two characters from the keyboard)
5. Read two different arrays of characters and check whether they are same or not.
6. Read two different arrays of integers which are in ascending order and merge them into a single array(that should also be in ascending order)