

COMP1020 Winter 2024

In-Class Participation Week 5 Thursday

Q1) Write a Java program to **create a multiplication table** for a number using loops in the format given below. Next, write the multiplication table in a file named "**MulTable.txt**" [2]

2 * 1 = 2

2 * 2 = 4

2 * 3 = 6

2 * 4 = 8

2 * 5 = 10

Q2) Write a Java program to perform a **linear search on an ArrayList** to find the **first occurrence of a prime number** in an arraylist of integers. If found, return the prime number; otherwise, return -1. [2]

Prime Number (https://en.wikipedia.org/wiki/List_of_prime_numbers)

A prime number (or prime) is a natural number greater than 1 that has no positive divisors other than 1 and itself.

Q3) An array has elements: [1]

18, 10, 4, 23, 12, 21, 8, 21, 33, 45.

How many **swaps** are required to complete the sorting using the bubble sort?(don't use VSCode IDE)