TON DUC THANG UNIVERSITY

Faculty of Information Technology

Exercises for Lab 4

1. Write functions to calculate the following expressions

   a. $\sum_{i=1}^{n} \frac{i}{2}$

   b. $\sum_{i=1}^{n} (2i + 1)$

   c. $\sum_{i=1}^{n} (i! + 1)$

   d. $\prod_{i=1}^{n} i!$

   e. $\prod_{i=1}^{n} \frac{2i}{3}$

2. Write functions to find the maximum, minimum of an integer array.

3. Write a program to search an element in an array by providing key value.

4. Write a program to sort array elements in ascending order.

5. Write a program to add, subtract and multiply two matrices.