



# University of Colombo School of Computing

## Data Structures and Algorithms II

Tutorial - 1

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### time.h in C

In one text (.txt) file

1. What is the **time.h** header file?
2. Describe three time related data types.
  - (i) clock\_t
  - (ii) time\_t
  - (iii) struct tm
3. Define following predefined functions.
  - (i) difftime()
  - (ii) ctime()
  - (iii) clock()

In two C (.c) files

4. Write a program to print the date and time of the system.
5. Write these C programs in a single file,
  - (i) To calculate the time taken to add 8000 numbers to the program.
  - (ii) To calculate the time taken to add 8000 numbers with pointers.

**Hint** - Use loops to put data into arrays