CS102 - Lab 4 - 19/05/2023

problem1

Write a program that dynamically allocates memory for a structure representing a book. The structure should have members for the title, author, and publication year.
Prompt the user to enter the information for a book and display it before freeing the allocated memory.

problem2

Write a program that dynamically allocates memory for a structure representing a book. The structure should have members for the title, author, and publication year. Prompt the user to enter the number of books.
The program should be able to read the information about the specified number of books and print the information for a book and display it before freeing the allocated memory.

problem3

Write a program to search for an element using the linear search approach. The program should be able to allocate the memory for the required number of elements dynamically when the program is under execution. Use the suitable dynamic memory allocation functions.

problem4

Write a program to search for an element using the binary search approach. The program should be able to allocate the memory for the required number of elements dynamically when the program is under execution. Use the suitable dynamic memory allocation functions.

problem5

Write a program to implement the the first come first serve CPU scheduling algorithm using the queue.

Sample I/O

Input:

Process	Burst_time
P1	20
2	7
3	10

Output:
Average waiting time: (0+20+7)/3=9