**CS2106 Introduction to Operating Systems**

**Lab 1 - Leveling Up on C**

**Answer Book**

Please read the instructions in the main lab sheet before completing this document. Submission deadline is **Sunday 8 September 2024, 11.59 pm (2359 hrs)**.

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| --- | --- |
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Section 1.

**Question 1.1 (1 mark)**

It looks for the stdio.h file in the directory “/usr/include”.

**Question 1.2 (1 mark)**

It means the variables have internal linkage and are local to the current source file (i.e. they are inaccessible to other source files).

**Question 1.3 (1 mark)**

Missing function declarations/prototypes for enq(double) and deq() in “queue.h”.

**Question 1.4 (1 mark)**

void enq(double);

double deq();

Section 2

**Question 2.1 (1 mark)**

|  |  |  |
| --- | --- | --- |
| **Variable** | **Global / Local** | **Address** |
| p1 |  |  |
| p2 |  |  |
| p3 |  |  |
| p4 |  |  |
| w |  |  |
| x |  |  |
| y |  |  |
| z |  |  |

**Question 2.2 (1 mark)**

|  |  |
| --- | --- |
| **Variable** | **Location (S, D, T or H)** |
| p1 |  |
| p2 |  |
| p3 |  |
| p4 |  |
| w |  |
| x |  |
| y |  |
| z |  |

How I inferred these answers from Q2.1:

<Your answer here>

**Question 2.3 (1 mark)**

<Your answer here>

**Question 2.4 (1 mark)**

<Your answer here>

**Question 2.5 (1 mark)**

<Your answer here>

Section 3

**Question 3.1 (1 mark)**

<Your answer here>

**Question 3.2 (1 mark)**

<Your answer here>

**Question 3.3 (1 mark)**

<Your answer here>

Section 4

**Question 4.1 (1 mark)**

<Your answer here>

**Question 4.2 (1 mark)**

<Your answer here>

**TOTAL: \_\_\_\_\_\_\_\_\_\_\_ / 14**