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| --- | --- | --- | --- |
| **Name:** | **Lee Yan Cheng** | **Lab Group#:** |  |
| **Student Id:** | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **A** | **0** | **1** | **9** | **9** | **1** | **4** | **1** | **B** | |  | |

**Page 2**

3a. Brief description of the approach you used for binary form conversion. [**4 pts**, includes program correctness]

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| Initialize an integer array of size 32 to hold 32 bits. Using a while loop, constantly divide the input by 2 and storing the remainder from each successive division, until the input is zero. Iterate through the array in reverse to get the binary form of the input. |

3b. Brief description of the approach you used for hexadecimal form conversion. [**4 pts**, includes program correctness]

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| Initialize a character array of size 32. Using a while loop, constantly divide the input by 16 and storing the remainder from each successive division, until the input is zero. Utilize the ASCII table to convert the remainder to a character. Since 0 is 48 in ASCII, add 48 for remainders less than 10. And since A is 65 in ASCII, add 55 for remainders more than 9. Iterate through the array in reverse to get the binary form of the input. |