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| **Group No:** 55  **Group Member:**   1. Prangthip Buatongthanakarn 2. Nuttamas Udomsantitham 3. Kritsada Limsripraphan 4. Supanut Udompataikul 5. Tarmeesee Daoh |

# Part 0: Preparation

* Download “Activity 1 Resources” from CourseVille.
* In Part 2, each group is assigned to work with the files: [YOUR\_GROUP\_NO].bmp, and [YOUR\_GROUP\_NO].gif in “02 Pic” folder
* Answer the questions in the box given and submit this file (.docx format) to CourseVille.

# Part 1: Text Representation

1. Open “sample\_utf8.txt” in Notepad and see the content.
   * Open “sample\_utf8.txt” in HexEdit.
   * Note that the first three bytes (from the address 0x00 – 0x02) are the BOM for text files encoding in UTF-8.
   * What is the Hex UTF-8 code of the character A? How many bytes are used for the character?

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| * Hex UTF-8 code of the character A is 0x41. * The character A use 1 byte. |

* + What is the Hex UTF-8 code of the white space character? How many bytes are used for the character?

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| * Hex UTF-8 code of the white space character is 0x20. * The white space character use 1 byte. |

* + What is the address of the character ข? What is its Hex UTF-8 code? (The value at address 0xFF is in row F0 and column 0F.)

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| * Hex UTF-8 code of the character ข is 0xE0 0xB8 0x82. * The character ข use 3 byte. |

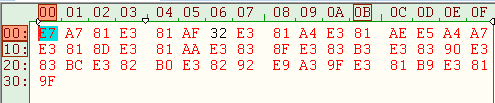
* + Use HexEdit to replace the character ข with the character ง. Save the file as “sample\_utf8\_modified.txt”. Open it in Notepad and see whether the content of the file is correct. How to do that?

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| * Change the data at ข character address. (change from 82 to 87) |

* + Make a screen capture showing the hex content of “sample\_utf8\_modified.txt”.

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1. Consider the following Hex content of a file.



* + What is the size (in bytes) of this file?

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| * 49 bytes |

* + Type in this Hex content into a new file. Save the file as “hamburger.txt”
  + Open the file in Notepad. What is the content? Use Google Translate to translate the content of the file to English. What does the file say?

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| * The file say “I ate two big hamburgers”. |