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| **CS232 HW#1 Grading Sheet**  **Deadline: 3:30pm, February 11**  **Early Bird Bonus Deadline: 3:30pm, February 6** | | |
| **Github Repo** | https://github.com/MananSThakkar/CS232 | |
| **Branch** | Master | |
| **Commit ID** | 92161a38f24349015a4810408d42cc82ba57c2c3 – honor code  42e04530cebea17970a4cfae529192ce4e374f1e – HW 1 | |
| **Member#1** | Manan Thakkar | |
| **Member#2** |  | |
| Please at least fill “A”, “P” or “N” in all the ”Your solution” cells.  **A-all finished P-Partially finished N-None finished**  If you mark the task “N”, it receives 15% of max possible points for the task (It does not apply to extra-point tasks). If you leave it blank, it receives 0 points.  Please leave “Feedback” cells blank for course staff | | |
| **Task 1 Git Merge (20%)**   1. The final honor\_code\_cs232 in your repo must be complete, containing acknowledgements from both members. 2. By tracing the git commit history, it must be clear the original honor\_code\_cs232 comes from merging with **test\_branch**. Copying-pasting or transfering the original file in any other way is NOT allowed. 3. By tracing the git commit history, it must be clear each student is responsible for reading, acknowledging and pushing their own honor code. | | **Feedback** |
| **Your solution (list your branch if not master):**  honor\_code\_cs232 is under master branch and also under the test branch, both of them have my name added to the file. HW1 grading sheet available on master branch as well as Blackboard. | |  |
| **Task 2 Conversion Table (50%)** | | **Feedback** |
| **Your solution:**  **Unsigned** | |  |

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| **Decimal** | **Binary** | **Hexadecimal** |
| 10 | 0b0000 1010 | 0x0A |
| 241 | 0b1111 0001 | 0xF1 |
| 15 | 0b0000 1111 | 0x0F |
| 162 | 0b1010 0010 | 0xA2 |
| 250 | 0b1111 1010 | 0xFA |
| 255 | 0b1111 1111 | 0xFF |

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| **Task 3 Binary Alphabet (20%)** | **Feedback** |
| **Your solution:**   * 1. What five decimal digits produce the pattern above? What five hexadecimal digits?   Answer : - Decimal- 6, 9, 15, 9, 9 ; Hexadecimal: 6, 9, F, 9, 9   * 1. What letter is drawn with 1,1,9,9,6? 0xF8F88?   Answer : - 1, 1, 9, 9, 6 = J ; 0xF8F88 = F   * 1. What is the hexadecimal representation you would use to spell the letter 'B'? 'N' (you probably won't want to use 5 hex digits for this one)?   Answer: - B = 0xF9F9F, N = 0x09DB9 |  |
| **Task 4 500 $1 Bills (10%)** | **Feedback** |
| **Your solution:** |  |

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| 204 | 0b1100 1100 | 0xCC |
| -35 | NA | NA |
| 128 | 0xb1000 0000 | 0x80 |
| 105 | 0b0110 1001 | 0x69 |

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| **Two's Complement** | | |
| **Decimal** | **Binary** | **Hexadecimal** |
| -10 | 0b1111 0110 | 0xF6 |
| -15 | 0b1111 0001 | 0xF1 |
| 15 | 0b0000 1111 | 0x0F |
| -94 | 0b1010 0010 | 0xA2 |
| 250 | 0b1111 1010 | 0xFA |
| -1 | 0b1111 1111 | 0xFF |
| -52 | 0b1100 1100 | 0xCC |
| -35 | 0b1101 1101 | 0xDD |
| 128 | 0b1000 0000 | 0x80 |
| 105 | 0b0110 1001 | 0x69 |

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| Envelope 1: - 1  Envelope 2: - 2  Envelope 3: - 4  Envelope 4: - 8  Envelope 5: - 16  Envelope 6: - 32  Envelope 7: - 64  Envelope 8: - 128  Envelope 9: - 245  Yes, it is possible: - for instance take 489: - I will give you envelopes 9, 8, 7, 6, 5 and 3 which will be total of 489. Similarly, we can choose any number between 1 and 500 and we can find envelopes for that number | |  |
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| **Instructor used only** | | |
| Early bird bonus |  | |
| Late submission penalty |  | |
| Others |  | |
|  | Total: | |