Jacob Levine

HW 3

ELC 411

9/13/17

|  |  |  |
| --- | --- | --- |
| Binary | Unsigned decimal | Signed decimal |
| 010000 | 16 | 16 |
| 100001 | 1 | -1 |
| 010111 | 23 | 23 |
| 111000 | 56 | -24 |
| 111001 | 57 | -25 |
| 001111 | 15 | 15 |
| 101011 | 43 | -11 |
| 110110 | 54 | -22 |
| 101010 | 42 | -10 |
| 100011 | 35 | -3 |

|  |  |  |  |
| --- | --- | --- | --- |
| Letter | Output | Carry | overflow |
| a | 111111 | 1 | 1 |
| b | 101010 | 0 | 0 |
| c | 111100 | 0 | 0 |
| d | 101001 | 0 | 0 |
| e | 101011 | 0 | 0 |

|  |  |  |
| --- | --- | --- |
| Operation | Carry | overflow |
| 1101 + 1100 | 1 | 0 |
| 1101 - 1100 | 0 | 0 |
| 1100 + 1010 | 1 | 1 |
| 0100 - 0110 | 0 | 1 |
| 0100 + 0010 | 0 | 0 |
| 0100 + 0110 | 0 | 0 |
| 1100 - 0110 | 1 | 0 |

1. Storing the string takes 8 bytes, as it is 8 characters in ASCII. The memory reads as follows in hexadecimal: 436F727465782D4D