Assignment 1

Deadline: Monday 17-FEB-2020

* No Assignment will be accepted after the deadline.
* You need to submit the assignment in Hard-form (hand-written on paper).
* In case I am not available in office, DON’T PLACE ASSIGNMENT ON MY DESK.
* CALCULATORS ARE NOT ALLOWED
* Best of Luck.

Question # 1: Complete the table. (4 bits: -8,4,2,1)

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| --- | --- | --- | --- |
| Decimal | Signed Magnitude Form | 1’s Complement | 2’s Complement |
| 7 | 0111 | 0111 | 0111 |
| 6 | 0110 | 0110 | 0110 |
| 5 | 0101 | 0101 | 0101 |
| 4 | 0100 | 0100 | 0100 |
| 3 | 0011 | 0011 | 0011 |
| 2 | 0010 | 0010 | 0010 |
| 1 | 0001 | 0001 | 0001 |
| 0 | 0000 | 0000 | 0000 |
| -0 | 1000 | 1100 | NA |
| -1 | 1001 | 1110 | 1111 |
| -2 | 1010 | 1101 | 1110 |
| -3 | 1011 | 1100 | 1101 |
| -4 | 1100 | 1011 | 1100 |
| -5 | 1101 | 1010 | 1011 |
| -6 | 1110 | 1001 | 1010 |
| -7 | 1111 | 1000 | 1001 |
| -8 | NA | NA | 1000 |

Question # 2. Find the answer of the following in sign magnitude, 1’s complement, and 2’s complement

1. 5+(-5)
2. 6+(-2)
3. (-5)+5
4. (-3)+7