**Question 2a**

+-----------------+---------------+---------------------+

|Decimal (Base 10)|Binary (Base 2)|Hexadecimal (Base 16)|

+-----------------+---------------+---------------------+

|0 |0000 | 0|

+-----------------+---------------+---------------------+

|1 |0001 | 1|

+-----------------+---------------+---------------------+

|2 |0010 | 2|

+-----------------+---------------+---------------------+

|3 |0011 | 3|

+-----------------+---------------+---------------------+

|4 |0100 | 4|

+-----------------+---------------+---------------------+

|5 |0101 | 5|

+-----------------+---------------+---------------------+

|6 |0110 | 6|

+-----------------+---------------+---------------------+

|7 |0111 | 7|

+-----------------+---------------+---------------------+

|8 |1000 | 8|

+-----------------+---------------+---------------------+

|9 |1001 | 9|

+-----------------+---------------+---------------------+

|10 |1010 | A|

+-----------------+---------------+---------------------+

|11 |1011 | B|

+-----------------+---------------+---------------------+

|12 |1100 | C|

+-----------------+---------------+---------------------+

|13 |1101 | D|

+-----------------+---------------+---------------------+

|14 |1110 | E|

+-----------------+---------------+---------------------+

|15 |1111 | F|

+-----------------+---------------+---------------------+

|16 |00010000 | 10|

+-----------------+---------------+---------------------+

|17 |00010001 | 11|

+-----------------+---------------+---------------------+

|18 |00010010 | 12|

+-----------------+---------------+---------------------+

|31 |00011111 | 1F|

+-----------------+---------------+---------------------+

|100 |01100100 | 64|

+-----------------+---------------+---------------------+

|255 |11111111 | FF|

+-----------------+---------------+---------------------+

|256 |000100000000 | 100|

+-----------------+---------------+---------------------+

Process returned 0 (0x0) execution time : 0.430 s

Press any key to continue.

**Question 2b**

+-----+--------------+-------------+-----------+

|S/No.|Decimal Number|Binary Number|Remarks |

+-----+--------------+-------------+-----------+

|1 |11.81 |1011.11001 |Approximate|

+-----+--------------+-------------+-----------+

|2 |21.25 |10101.01 |Exact |

+-----+--------------+-------------+-----------+

|3 |97.897 |1100001.11 |Approximate|

+-----+--------------+-------------+-----------+

|4 |2.01 |10.0000 |Approximate|

+-----+--------------+-------------+-----------+

|5 |101.99 |1100101.1111 |Approximate|

+-----+--------------+-------------+-----------+

|6 |16. |10000.0000 |Approximate|

+-----+--------------+-------------+-----------+

|7 |55.76 |110111.11000 |Approximate|

+-----+--------------+-------------+-----------+

|8 |111.72 |1101111.1011 |Approximate|

+-----+--------------+-------------+-----------+

|9 |99.7 |1100011.10110|Approximate|

+-----+--------------+-------------+-----------+

|10 |71.748 |1000111.10 |Approximate|

+-----+--------------+-------------+-----------+

|11 |39.341 |100111.0101 |Approximate|

+-----+--------------+-------------+-----------+

|12 |25.52 |11001.1000 |Approximate|

+-----+--------------+-------------+-----------+

|13 |38.09 |100110.000 |Approximate|

+-----+--------------+-------------+-----------+

|14 |65.396 |1000001.01 |Approximate|

+-----+--------------+-------------+-----------+

|15 |56.27 |111000.01 |Approximate|

+-----+--------------+-------------+-----------+

|16 |53.15 |110101.0010 |Approximate|

+-----+--------------+-------------+-----------+

|17 |24.382 |11000.01 |Approximate|

+-----+--------------+-------------+-----------+

|18 |12.77 |1100.11000 |Approximate|

+-----+--------------+-------------+-----------+

|19 |31.849 |11111.11 |Approximate|

+-----+--------------+-------------+-----------+

|20 |85.27 |1010101.01000|Approximate|

+-----+--------------+-------------+-----------+

|21 |67.94 |1000011.11110|Approximate|

+-----+--------------+-------------+-----------+

|22 |53.52 |110101.100 |Approximate|

+-----+--------------+-------------+-----------+

|23 |72.81 |1001000.1100 |Approximate|

+-----+--------------+-------------+-----------+

|24 |111.36 |1101111.0101 |Approximate|

+-----+--------------+-------------+-----------+

|25 |66.699 |1000010.101 |Approximate|

+-----+--------------+-------------+-----------+

|26 |65.544 |1000001.10 |Approximate|

+-----+--------------+-------------+-----------+

|27 |12.76 |1100.11000 |Approximate|

+-----+--------------+-------------+-----------+

|28 |34.76 |100010.110 |Approximate|

+-----+--------------+-------------+-----------+

|29 |85.61 |1010101.10011|Approximate|

+-----+--------------+-------------+-----------+

|30 |23.393 |10111.01100 |Approximate|

+-----+--------------+-------------+-----------+

Process returned 0 (0x0) execution time : 0.535 s

Press any key to continue.