Justin Ngo jmn4fms 2/13/2020 radixWorksheet.pdf

UVa Email ID (no aliases please): jmn4fms

Name Justin Ngo Lab section 101

Lab 4 - Radix Conversion Worksheet

Convert:

1. 0x4F45 into octal
- 0100 1111 0100 0101
- 100 111 101 000 101
- 4 7 5 0 5
- 47505_8

2. 269_{10} into radix 7
- 269/7 = 38r3
- 38/7 = 5r3
- 5/7 = 0r5
- 533_7

3. 110011011110_2 into decimal
- $2^{11}+2^{10}+2^7+2^6+2^4+2^3+2^2+2^2+2^1$
- 2048+1024+128+64+16+8+4+2
- $=3294_{10}$

4. $2BD_{19}$ into decimal
- $2(19)^2+11(19)^1+13(19)^0$
- 7310+209+13
- $=7532_{10}$

5. Given the following positive binary integer in two's complement: 0101001101011101

    a) Convert the number to hexadecimal:

- $535D_{16}$

    b) Negate the number.

- 1010110010100011_2
- $ACA3_{16}$