Operating Systems and Architecture UFCFCU-30-1

Day 1 Tasks

Explain binary coded decimal. How does it work? What was it used for? Is it still used?

Are there any other physical forms of representing binary other than electricity, magnetism and electromagnetic?

What is octal and why was it used?

Explain with examples the two problems with Signed-Magnitude

What are the problems with floating point precision and rounding? Give two catastrophic examples.

The following tasks must be done manually

Convert the following binary numbers to decimal:  
  
01000101  
11101101  
01110111  
10101010

Convert the following decimal numbers to hexadecimal

31  
173  
204  
153

Convert the following hexadecimal numbers to binary  
  
BB  
22  
9F  
FA  
  
Convert the following binary numbers to hexadecimal  
  
10111011  
10000100