Tutorial 2
Floating Point

CO 2103 Assembly Language

This tutorial extends Tutorial 1. It deals with data representation in the floating point.

- **Task 1**: Read (and understand) the note on "Converting Real Numbers between Bases" and do the Exercise questions given.

- **Task 2**: Read (and understand) the note on "IEEE 754 Floating Point Standard" and do the Exercise questions given.

- **Task 3**: Answer the following questions:
  - What is the trade off between the size of the mantissa field and the size of the exponent field?
  - Why is the sign bit for the mantissa separated out and placed in the MSB of the number?
  - With the IEEE 754 standard, which field(s) need to be examined to do a comparison?