ID2090-Assignment-2

ME19B103

Q3

Paid tools, software and their free counterparts

1) Microsoft Visio(Paid) and Dia (Free):

Dia is a versatile diagram editor comparable to Microsoft Visio. Besides the native shapes, others can be added very easily by editing an XML file. Diagrams can be exported to several known formats (EPS, SVG, XFIG, WMF, and PNG, to name a few) for sharing and easier visualization.

- Matlab (paid) and GNU Octave (Free):
 Softwares for solving, optimising problems with mathematical equations.
- 3) <u>ChemDoodle</u> (Paid) and <u>Jmol</u> (Free):

 Softwares to visualise chemical bonds and structures.
- Aifora (Paid) and ImageJ (Free):
 Scientific Image processing and analytic softwares. Useful to analyse microscopic images.
- 5) Ansys (Paid) and FreeFEM (Free):

 Softwares to execute Finite Element Analysis. Ansys provides a free student version.

Reference:

- 1) https://www.tecmint.com/best-free-open-source-softwares-of-2018/
- 2) https://in.mathworks.com/products/matlab.html
- 3) https://www.gnu.org/software/octave/index
- 4) https://imagej.nih.gov/ij/features.html
- 5) https://www.aiforia.com/
- 6) http://dia-installer.de/index.html.en
- 7) http://jmol.sourceforge.net/
- 8) https://freefem.org/