Assignment

Answer any one of the following:

1. Write a computer programming to deduce the total number of atoms and surface atoms for different shell of cuboctahedral/spherical shape. Plot % of atoms in bulk/surface versus particle size. The user should get idea to generate the thickness or size of nanoparticle for a particular application (optical/electrical/magnetic/strength)

2. Write the program to simulate the confinement length of different semiconductors. One should able to predict the length of semiconductor to be used in technology for electron transport. Keep the flexibility in the program to discard the semiconductor from Nanoelectronics.

3. Write the program to predict confinement length of metal. Your simulation should give the message about the utility of the material for nanometer scale connection.

Use any computer language to write the program