1. Using the reference (in this directory)

T. J. R. Hughes, J.A. Cotrell, Y. Bazilevs, Isogeometric analysis: CAD, finite elements, NURBS, exact geometry and mesh refinements, Computer Methods in Applied Mechanics and Engineering 194 (2005) 4135-4195

please describe the way how knot vectors define B-spline basis functions (please show some exemplary knot vectors and resulting B-spline basis functions (see chapter 2).

2. Using the reference (in this directory)

T. J. R. Hughes, J.A. Cotrell, Y. Bazilevs, Isogeometric analysis: CAD, finite elements, NURBS, exact geometry and mesh refinements, Computer Methods in Applied Mechanics and Engineering 194 (2005) 4135-4195

please describe the way we perform h-refinement, p-refinement and k-refinement for B-spline basis functions

3. Using the reference Michael T Heath "A tale of two laws" (in this directory) please refer the application of the Amdhal low for the analysis of the best possible speedup of parallel algorithms (see chapter 3)

4. Using the reference (in this directory) Marcin Łos, Maciej Wozniak, Maciej Paszynski, Andrew Lenharth, Keshav Pingali IGA-ADS : Isogeometric Analysis FEM using ADS solver, Computer & Physics Communications 217 (2017) 99- 116 please describe the direction-splitting algorithm