

NAG Library Chapter Contents

D06 – Mesh Generation

D06 Chapter Introduction – a description of the Chapter and an overview of the algorithms available

Routine Name	Mark of Introduction	Purpose
D06AAF	20	nagf_mesh_2d_gen_inc Generates a two-dimensional mesh using a simple incremental method
D06ABF	20	nagf_mesh_2d_gen_delaunay Generates a two-dimensional mesh using a Delaunay–Voronoi process
D06ACF	20	nagf_mesh_2d_gen_front Generates a two-dimensional mesh using an Advancing-front method
D06BAF	20	nagf_mesh_2d_gen_boundary Generates a boundary mesh
D06CAF	20	nagf_mesh_2d_smooth_bary Uses a barycentering technique to smooth a given mesh
D06CBF	20	nagf_mesh_2d_sparsity Generates a sparsity pattern of a Finite Element matrix associated with a given mesh
D06CCF	20	nagf_mesh_2d_renumber Renumbers a given mesh using Gibbs method
D06DAF	20	nagf_mesh_2d_transform_affine Generates a mesh resulting from an affine transformation of a given mesh
D06DBF	20	nagf_mesh_2d_join Joins together two given adjacent (possibly overlapping) meshes
