!Frame

!BEAM189: 3-nodes, quadratic line body element, 6 DOF per NODE

!Steel, E=210GPa, Poisson’s ratio 0.3

!Incomplete script provided. Fill in xxx

FINISH

/CLEAR

/PREP7

!Dimensions: length xxx, force xxx, stress xxx

HEIGHT=xxx

WIDTH=xxx

!Define locations of key points.

xxx

!Create lines connecting key points

xxx

!Define element information:

ET,1,BEAM189

SECTYPE,1,BEAM,RECT !Defines the cross-section of the beam as a rectangle.

SECOFFSET,CENT

SECDATA,xxx,xxx

MP,EX,1,xxx

MP,PRXY,1,xxx

LSEL,ALL

LMESH,ALL !Mesh the line – in other words, create the elements

FINISH !Finish the preprocessing

/SOLU !Enter the solution processor (define loads and constraints)

!Define constraints at key points xxx and xxx

Xxx

!Define loading at key point

xxx

ALLSEL

SOLVE

FINISH !Finish and exit “solution”

/POST1 !Enter the general post-processor

/ESHAPE,1 !Display element shapes using section data

/DSCALE,ALL,1 !Plot using true scale

/RGB,INDEX, 0, 0, 0,15 !set text color to black

/COLOR,WBAK,14 !Set background color to light grey

FINISH !Finish and exit the post-processor

SAVE !Save the data base