There are the following JAVA classes implementing the multi-frontal direct solver algorithm for finite difference problem:

- *A.java*

- *A1.java*

- *A2.java*

- *AN.java*

- *Aroot.java*

- *BS.java*

- *E2.java*

- *Eroot.java*

- *Executor.java*

- *Main.java*

- *P1.java*

- *P2.java*

- *P3.java*

- *Production.java*

- *Vertex.java*

We have already implemented all the classes for the exemplary elimination tree with 6 elements, presented in Figure 1.

Please compile all the JAVA classes and run the solver.

Please extend the *Executor* class so it generates elimination tree with size 2^k, where k is a given parameter.