Using Netkit, implement the network depicted in the figure and described below.

- Routers of the same AS run RIP protocol (exclusively within their AS but redistributing connected LANs and BGP).
- All routers run BGP.
  - No router announces the default route (0.0.0.0/0).
  - Each router only originates AS LANs and peering LANs.
  - BGP policies are as follows:
    - AS1 prefers to receive traffic from link B rather than from link C
    - AS2 prefers to receive traffic from link F rather than from link E
    - AS3 prefers to receive traffic from link H rather than from link I

**Goals:**
Every IP address in the network must be reachable from any router.
The traffic generated by as4r2 and directed to 1.0.0.2 traverses links J, H, G, F, D, B, A.