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

- All routers run BGP.
  - No routers announce the default route (0.0.0.0/0).
  - Each router only announces the peering LANs.
  - No routers have internal subnets.

- BGP routers in each autonomous system are set up in order to force traffic to traverse the ring clockwise: AS1 prefers announcements coming from AS2, and so on.

**Goals:**

Every IP address in the network must be reachable from any router.

The traffic generated inside each autonomous system must traverse the network clockwise. For example, traffic generated inside AS4 must pass through AS5, AS6, AS7, AS8, AS1, AS2, and AS3 (of course, directly connected networks are always reached via the attached interface).
Using Netkit, implement the network depicted in the figure and described below.

- All routers run BGP.
  - No routers announce the default route (0.0.0.0/0).
  - All routers announce the peering LANs.
- Routers as10r1, as30r1, as60r1, and as80r1 also announce their internal subnets (in grey).
- BGP routers inside AS10, AS30, AS60, and AS80 are set up to filter specific routes. In particular:
  - AS10 filters out prefixes coming from AS60.
  - AS30 filters out prefixes coming from AS80.
  - AS60 filters out prefixes coming from AS10.
  - AS80 filters out prefixes coming from AS30.
- Router as50r1 prefers announcements coming from as70r1.

**Goals:**
Every IP address in the network must be reachable from any router.
The traffic must respect filters and policies given in the text. For example each IP address in the network can be reached starting from as10r1, except those IP addresses belonging to the prefix 160.0.0.0/24.