- 1. The primary functions of the network layer include
 - A. move traffic from sending host to a receiving host
 - B. forward traffic from a router's input link to its output link
 - C. coordinate the forwarding action of each router
 - D. all of the above
- 2. Network layer protocols can run in
 - A. every host
 - B. every router
 - C. the network edge and core
 - D. all of the above
- 3. The forwarding tables that determines the forwarding behavior of a router can only be configured by a routing protocol.

A. True B. False

4. With longest prefix matching (the forwarding table is shown in the below), a packet with destination address 11001000 00010111 00010110 10100001 will be forwarded to link interface

A. 0 B. 1 C. 2 D. 3

Prefix Match	Link Interface
11001000 00010111 00010	0
11001000 00010111 00011000	1
11001000 00010111 00011	2
otherwise	3

Figure 1: Forwarding table (with longest prefix matching) for question 4

- 5. A router's switching fabric is almost always implemented in hardware whereas the management and control plane are usually implemented in software.
 - A. True B. False