

# Computer Systems Assignment 0 — 2016

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Due Sunday, June 12

Submit in class on Sunday. Print your name clearly in both English and Chinese and print your student number.

**Q0 [10]** Suppose two LANs are connected by a high-speed link. A host A0 on LAN A sends an single internet packet to a host B2 on LAN B. See my notes for a picture. Show a series of pictures illustrating how A0 can send a packet of total size 1000 bytes (octets), including header, to B2. Assume that on LAN A data frames are limited to a payload of 800 bytes, that the gateways communicate with data frames of at most 500 bytes of payload and that LAN B uses data frames of at most 400 bytes of payload.

**Q1 [5]** Suppose that the gateways of two LAN networks, A and B, are connected by a series of links that can only handle IPv6 packets. Can a computer on LAN A send IPv4 packets to a computer on LAN B? What must the gateway do to make this possible.