1. Suppose the packet size of the last fragment (8th fragment) is **230 bytes**, including **22 bytes of header**. Also, this packet has an offset value of **182**. [First byte number starts from 0]. **All fragments have the same size**.
   a. Identify the original intact packet size
   b. Identify the MTU of the network and the 6th fragment's fragment offset.
   c. What's the MF value of the 6th fragment?

2. You receive a packet whose total length is **985** bytes, ID is **4567** and the MF flag is set to 0. You received the remaining **10** packets, each having a total length of **2883 bytes**, ID of 4567 and the MF flag is set to 1. All of these packets' header size is **35 bytes**.
   a. Find the data size of the original datagram before fragmentation.
   b. Find the value of the offset field of the 2nd packet [First data byte number starts at 0]
   c. How would you identify the last packet in a group of fragmented packets?

3. Given a packet containing data of 9600 bytes and a header of size 56 bytes, it needs to go through a link with an MTU of X bytes. It took 10 fragments of equal size to transport the entire data packet. Assume the start byte number is 0.
   a. Calculate the packet size of each of the fragments.
   b. Identify the value of MTU
   c. Calculate the offset value of the 5th packet.

4. Given a packet of size X bytes, including a header of size 44 bytes, needs to be sent through a link having an MTU of 1884 bytes. All the fragmented packets are of the same size. The original packet was fragmented into 15 packets. Assume the start byte number is 0.
   a. Calculate the data size of each fragment.
   b. Identify the value of X.
   c. Calculate the offset value of the 9th packet