1. Consider the following disk configuration.
   - 512 bytes/sector
   - 96 sectors per track
   - 110 tracks per surface
   - 16 usable surfaces
   - rotation speed: 7200 rpm

a) Calculate how much disk space (in sectors, tracks and surfaces) will be required to store 300,000 120-byte records. Ignore any file header record(s) and track indices, and assume that a record cannot span two sectors.

b) What is the average rotational delay of the disk drive?

c) What is the transfer time to read one sector?

2. Using SSTF, SCAN and C-SCAN, find the track access order for the following arrival sequence of disk track requests: 129, 110, 186, 147, 41, 10, 64, 120. Assume that the disk drive is now serving a request at track 100 and is moving in the direction of increasing track number.