FAT Partitions

1. Download the following image from (<http://sceweb.sce.uhcl.edu/abeysekera/itec3831/Assignments/FAT16.dd> ) onto your desktop. Open the image in Imager and answer the following questions.
   1. Look at the MBR and answer the following questions.
      1. How many partitions are there on this image?
      2. What is the starting sector # of each partition (physical sector number)?
      3. What is the size of each of the partitions?
      4. Is there any unallocated space on the physical device? If so, what is the starting sector numbers of the unallocated space?
   2. Answer the following questions about **each of the partitions.**
      1. What is the **logical** sector number of the boot record?
      2. What is the **physical** sector number of the boot record?
      3. How many bytes are there in a sector?
      4. How many FATs are there in the partition?
      5. How many sectors are in a cluster?
      6. How many hidden sectors are there in the partition?
      7. How many sectors are there in each FAT?
      8. What is the volume label of the partition?
      9. How many reserved sectors are there from the start of the volume?
      10. How many sectors are there in the partition?
      11. What is the **logical** sector number of the **first FAT**?
      12. What is the **physical** sector number of the **second FAT**?
      13. What is the **logical** sector number of the **root directory**?
      14. What is the **physical** sector number of the **root directory**?
      15. What is the **logical** sector number of the **data area**?
      16. What is the **physical** sector number of the **data area**?
   3. Imagine that your disk size is 300 MB and you install a FAT 16 filesystem on it. If a sector size is 512 bytes, what will the cluster size (in sectors) on this system be?