**LAB 7 REPORT**

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**Summary:**

Lab 7 was about reading the fat 12 file system. I learned a lot about reading and decoding FAT 12 file system in this lab. The image file was given to us so that we can encode the displacement of elements. We were basically tasked to decode the boot sector by reading the columns, so that we can get the value. We achieved this by implementing an endian swap function. This function basically converts two characters to unsigned short and then we return the unsigned value and take byte 1 and assign it to the lower byte of the value by using OR operation. The function then takes the upper byte of the value and assigns byte 2 by using OR operation again. Thus, we can see the result of this function in the given output.

**Output:**

mac-air-35:Lab07 vmal$ ./bsdump image

                    Name:   mkdosfs

            Bytes/Sector:   512

         Sectors/Cluster:   16

        Reserved Sectors:   1

          Number of FATs:   2

  Root Directory entries:   224

         Logical sectors:   2880

       Medium descriptor:   0x00f0

             Sectors/FAT:   1

           Sectors/Track:   18

         Number of heads:   2

Number of Hidden Sectors:   0

mac-air-35:Lab07 vmal$