1. Write a C program to find out the host byte ordering (little endian/big endian) of your machine. Your program must output the byte ordering of your machine along with the data stored in the individual bytes e.g, you can store a number in hex as 0x3412 and visualize how data is stored in the memory (either in little endian or big endian). You must be able to debug your program using **GNU Debugger** **i.e.,** to view variable values during running program, to insert breakpoints, to check some condition etc. **[3]**

* **Hint: C has a datatype short. It takes 2 bytes. Now, you can store some data in your short datatype and read memory byte wise. Well you can use other datatypes too.**