1) The memory allocated for any variable declared in a c program (any processes in general) can be done in any one of the stack , heap , bss , data segments.In this part you will try to create variables in these different segments.
    a) Create 2 variables(no other variable between created between these 2 in that program) such that it is created in stack and get the virtual addresses.
    b) Repeat a) for heap,bss,data segments and get the virtual addresses of both variables.
    c) Explain your observations on these virtual addresses.
    d) Allocate atleast 32bytes of memory in data and bss segments separately.Using “size” command, verify the memory size to be allocated in each segments.Screenshots of size command output should be added in the report along with reasoning on output.
    e) Get the virtual address range of the text segment of the code and explain how you arrived at that in the report. (You can use “gdb”)
2) (Optional) Get the physical address of a variable declared in any part of the memory segment.Explain the mechanism used, in the report and why you think it is correct.

Instructions for submission:

Question1) Make a folder called part1 with all the code related to that and a readme with the instructions to compile and run.Submit your code on how you created these variables.Explain your observations in the report clearly mention for which question you are explaining along with a table showing the addresses of each variables in each memory segment (table size: 2x4).

Question2) Make a folder called part2 with all the code and readme with instructions to compile and run.

Submission folder should contain 2 sub folders called part1 and part2 and a report.pdf file.Both folders contain code and readme.Don’t forget to mention the readme files and you group information in your submission.