Lab 9 Results

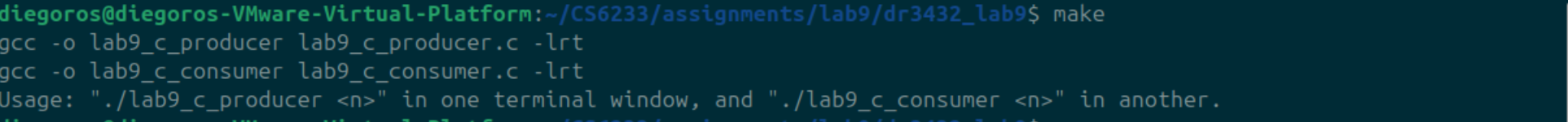
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* 1. Memory allocation: in fixed size partitioning programs and processes get allocated into fixed size memory partitions. While paging projects get divided into multiple pages.
  2. Contiguous memory: In fixed size partitions the entire program or process is loaded into a single block, meaning that all code is contiguous. In paging this is not the case as programs are loaded into potentially non-contiguous pages.
  3. Limiting size: fixed size partitioning has a limit to how large programs can be (the size of the partition) while paging is only limited by the total size of the memory.
  4. Contiguous memory: variable size partitioning loads the entire process into memory in one contiguous block of memory while segmentation separates the program into multiple segments and loads them in non-contiguous ways.
  5. Memory management: in variable size partitioning the MMU handles the contiguous blocks of memory and requires no extra steps. In segmentation we have to use a segment table to tell the MMU which segments belong to which processes (since they are non-contiguous).

1. Program of 5A split into two: lab9\_c\_producer and lab9\_c\_consumer.



A screenshot of a computer program

Description automatically generated

1. The address printed above was the virtual address for each process.

A screenshot of a computer program

Description automatically generated

A screenshot of a computer program

Description automatically generated

1. The addresses printed for n did not match. They do not match since this does not include any dynamic linking done at runtime as well as the addresses displayed above starting sequentially at 0 since the program is not loaded into memory.
2. The entry point (labeled \_start) for my producer code is at 00…011a0 and for my consumer code it is at 00…01180.

A screenshot of a computer program

Description automatically generated