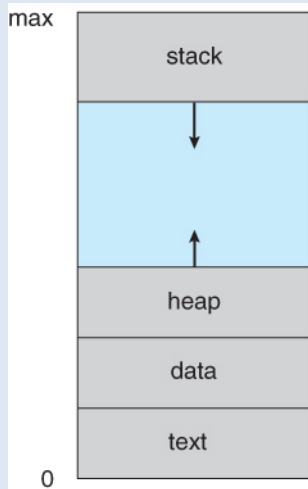# Program Vs. Process MMAP

- Program has

– text/code

– data: global/static/constant (init + uninit) and local (to methods)

– These take different locations in process memory map
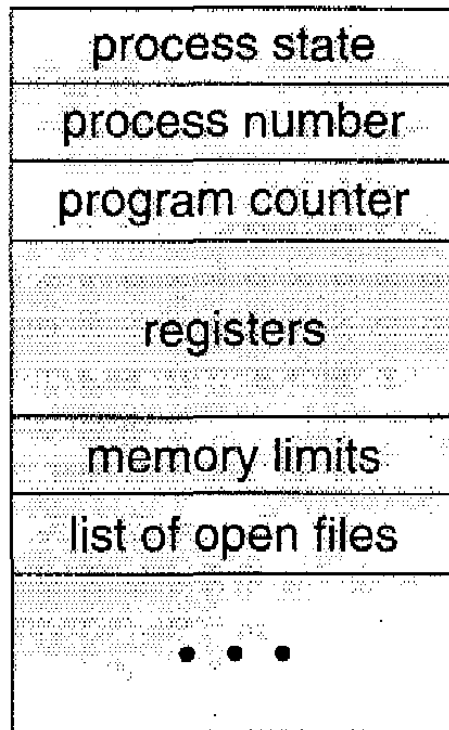

Stack: local variables + arguments   [rw]

Heap: dynamic variables (get created at R/T)   [rw]

Data: init + uninit [rw]

Text: machine code [wo]

Process Control Block

- Process is represented in the OS as Process Control Block (PCB)

process state
process number
program counter
registers
memory limits
list of open files
• • •

Process State: state from PSTD

Process number: ID

Program Counter: PC value

Registers: CPU's SPR, GPR, etc

Memory Limits: base and limit register values

Open files: open files during the course at a PP

Process Preemption/Switch