

Process Control Block (PCB)

Program Counter (PC)

fork()

- Creates a new child process
- OS creates a new PCB for child process

exec()

- Replaces current process memory space with a new program
- PCB for process remains

Memory Layout

- **Text Segment:** Executable Code
- **Data Segment:** Initialized global/static variables
- **Heap:**
- **Stack:**
- **BSS Segment:** UNinitialized global/static variables

Program Counter (PC)