Project Summary: The Project was about Intercommunication between CPU and memory. It consists of two classes CPU and Memory which will communicate with each other with the help of Process class , Runtime . The program will be initiated using CPU class via Command Line arguments with 2 parameters namely filename and timer value. Memory class will be initialized once CPU initiates itself. After loading Memory into Memory Class, CPU will start fetching Values from Memory one by one into Instruction register and Process it as per the Opcodes. The Timer will switch the Program counter to 1000 and start fetching values from 1000.

The Project was implemented in Java using Process class, runtime class methods, all the opcodes implemented using Switch cases. The program contains System stack and User stack which will keep on exchanging on system calls and interrupts. It reflects a complete prototype of How CPU and Processor communicates and work with each other.

Implementing this projects gave me a close look and made me understand about how CPU and Processor works at low levels and How data is getting fetched at every single instruction. It also gave me a clear Intuition of how interrupts get executed on timely manner. Overall it was a good experience of coding and making our own CPU and Processors and Implementing test cases and seeing output on the Screen.