

## **Homework 8**

Answer the following questions

- 1) List and briefly define the four main elements of a computer.
- 2) Define the two main categories of processor registers.
- 3) What is an interrupt? How are multiple interrupts dealt with?
- 4) What characteristics distinguish the various elements of a memory hierarchy?
- 5) What is cache memory? Explain the working of the cache memory in brief.
- 6) What is the difference between a multiprocessor and a multicore system?
- 7) Suppose a stack is to be used by the processor to manage procedure calls and returns. Can the program counter be eliminated by using the top of the stack as a program counter?