Basic Computer Organization

Assignment 1

1. Explain the use of the following registers:
   a. Program Counter
   b. Instruction Register
   c. Memory Address Register (MAR)
   d. Memory Data Register (MDR)
   e. Accumulator
   f. Stack Pointer
2. What are the differences between low level language and high level language ? Name some high level languages.
3. What are the differences between machine language and assembly language ?
4. What is an Operating System? Describe in short the major functions of an operating system. Name some operating systems.
5. State the difference between compiler and interpreter along with examples of each.
6. What are the differences, merits and demerits between Von Neumann/Princeton architecture and Harvard architecture?