Cisco Technical Questions

- Q. Big endian refers to
- a) Least significant byte stored in the smallest address.
- b) most significant byte stored in the smallest address
- c) most significant byte stored in the smallest address
- d) none of the above
- Q. Write a function to write a word to a particular sector of Flash Memory.
- Q. How does Bootstrapping help to load and start an operating system?
- Q. What are the limitations of Flash Memory?
- Q. What is the full form of SQL? What are the various functions used in SQL?
- Q. What is a Balanced Tree? What are Red-Black Trees?
- Q. Explain Insertion Sorting. How does Insertion Sorting differ from Binary Sorting?
- Q. Explain any given program for the insertion of node in Single Linked List.
- Q. What is Tree Traversal in Binary Tree? What are Pre-order, In-order and post-order in Depth-First traversal?
- Q. What is the purpose of Semaphore? What are the two operations of Counting Semaphore? Differentiate between a Semaphore and a Mutex.
- Q. What is a deadlock Situation? What are the different situations responsible for a deadlock to occur?
- Q. What is the physical address if the virtual address is [0,514] and the page table contains an entry (032).
- Q. Give one example of Floating point representation. How are the different operations carried out in floating point representation?
- Q. What is a Use Case Diagram? What are their advantages? Explain with the help of a simple use case example.
- Q. What do you understand by Collaboration in Java?
- Q. What is a Class Diagram in UML (Unified Modeling Language)?

- Q. What are the different types of Data warehouse Systems? What are Hybrid design Methodologies in Data warehouse Systems?
- Q. What is Application Binary Interface (ABI)? How is it responsible for the direction of flow of Stack?
- Q. Give three properties of Object oriented Analysis.
- Q. What is a Database Trigger in DBMS? Give an example.
- Q. What is a Program Segment Prefix (PSP)?
- CISCO Technical Paper for C language
- Q. Write and explain a C program for Binary Search.
- Q. Write a C program for nibble swapping of any hexadecimal data.
- Q. What are the bitwise shift operators?
- Q. What is the purpose of Binary Tree in C language? What are the different functions used in a Binary Tree?
- Q. What does a out stand for?
- Q. Write a program to print a number into its number name.
- Q. For the following program, what are the values of I and j at the end of the loop main() $\{j=0 \}$ For(i=0;i<10;i++) j+=i;
- Q. What is a Fork System call in C? In the following program, how many times "Hello" will be printed?

```
main()
{fork();
fork();
fork();
printf("Hello");
}
```

Q. What is a malloc function? What are the functions that may be used to allocate the dynamic memory during the execution of a program?

CISCO Technical Paper for Networking

- Q. Explain the different OSI layers and their functions.
- Q. Bridges are the part of which of the layers?
- Q. Which layer is responsible for end to end delivery of the data?
- Q. What is sliding Window Protocol? What are the layers in which the Sliding Window Protocol in used? What are the different types of a Sliding Window Protocol?
- Q. What is a Selective Repeat (ARQ) Protocol? What should be the window size of a sender and a receiver and Why?
- Q. What is an Address Resolution Protocol (ARP)? What is the packet structure of an Address Resolution Protocol?
- Q. What is a Client Server Architecture?