

1. True False Questions:

1	F	An algorithm with the time complexity $O(n)$ is faster than algorithm with the time complexity $O(n \log n)$, where both algorithms run on the same machine and $n=100$.
2	F	QuickSort is faster than binary search for the same input size N .
3	T	Worst case time complexity of sequential/linear search is $O(n)$
4	T	In singly linked list, last element points to NULL.
5	T	In a circular linked list no need to use 'tail' pointer.
6	F	In linked list data structure, nodes must always be integer.
7	T	Queue is a data structure in the type of FIFO.
8	T	Stack is a data structure in the type of LIFO.
9	T	Queue can be implemented using arrays.
10	F	Stack cannot be implemented using linked list.

2. Assume you are given the following code to display the content of a singly linked list. Please fill in the blanks properly.

```
void display (node *head)
{
    int count = 1;
    node *s;
    s = head;
    while (p != NULL)
    {
        printf ("\nNode %d: %s %d %c", count,
            s->name, s->age, s->gender);
        .....
        .....
    }
    printf ("\n");
}
```