

Insertion

```

n = list → header
for (i = list → level; i >= 0; --i)
    while (n → forward[i] → key) forward[i]
        update[i] = n
        n = n → forward[0]
    if n → key = search then
        for (i = 0; i < list → level)
            if (update[i] → forward[i] ≠ n)
                break;
        update[i] → forward[i] = n → forward[i]
        free(n)
    while (list → level > 0) & list → header
        → forward[list → level]
        = NULL
    list → level = list → level - 1

```

Search :

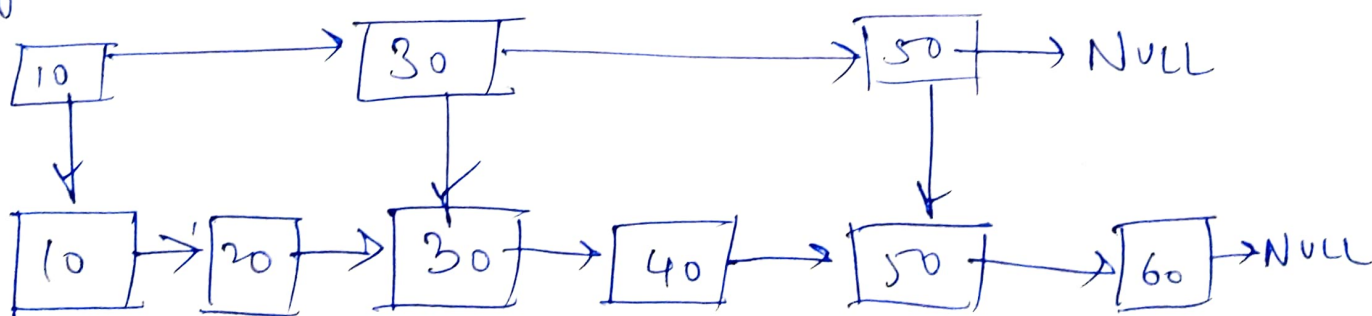
```

n = list → header
while (n → forward[i] > key) forward[i]
n = n → forward[0]
if (n → key = search key) return n → value
else return false

```

Skip list

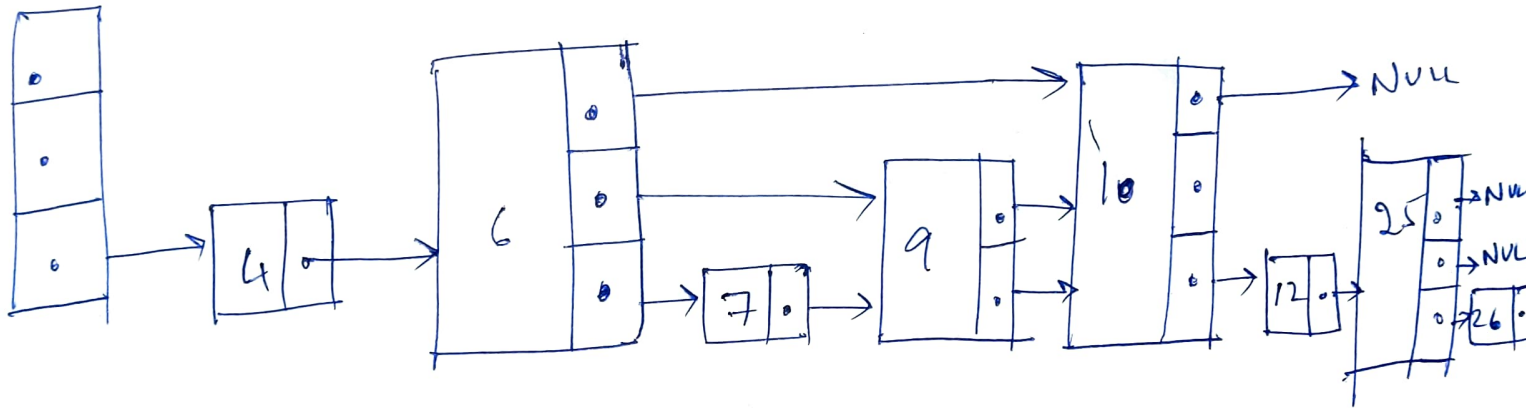
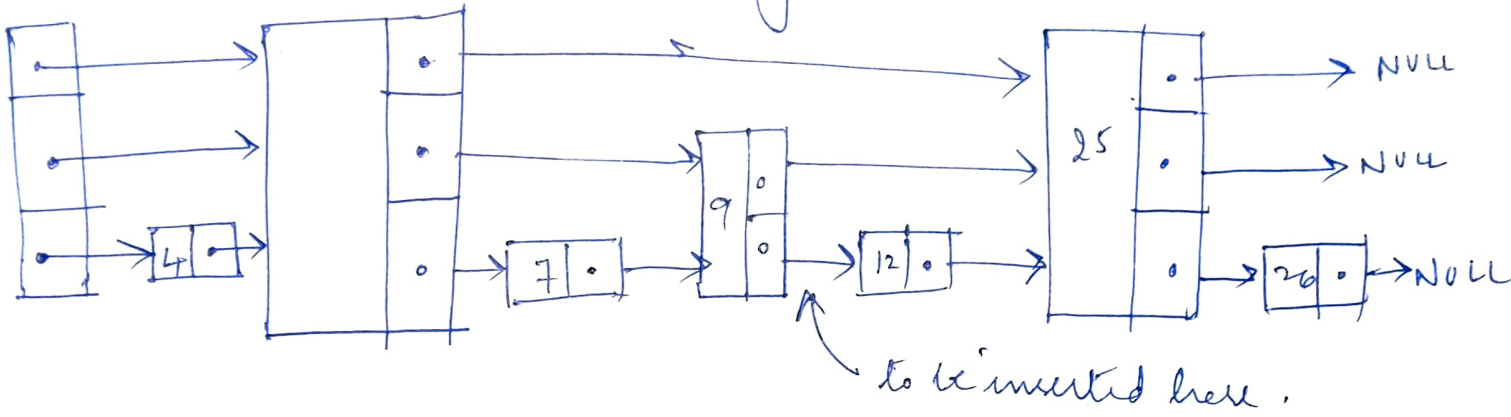
Diagram :



Insertion Diagram

Adithi Pai IBM18CS005

Inserting 10.



Deletion

Delete 9.

