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Lab7 - Reverse, Sort & Concat

→ **Concatenation**

```
void concatenate (struct node *a, struct node *b )
{
    if (a != NULL && b != NULL )
    {
        if (a->next , b);
    }
    else
    {
        printf ("Either a or b is NULL \n");
    }
}

struct node * concat (struct node * start1, struct node *start2 )
{
    struct node *ptr;
    if (start1 == NULL).
    {
        start1 = start2;
        return start1;
    }
    if (start2 == NULL)
        return start1;
    ptr = start1;
    while (ptr -> link != NULL )
            ptr = ptr -> link;
    ptr -> link = start2;
    return start1;
}
```

Reverse :

```
while   (current ! = NULL )
        {
            next =   current -> next ;
            current -> next =  prev;
            prev   =  current ;
            current = next ;
        }
        * head_ref  =  prev ;
```

Sort :

```
void sortlist ( ) {
    struct node  *  current = head ,  * index  = NULL;
    int  temp ;
  if (head == NULL) {
        return ;
    }
  else {
     while (current ! = NULL ) {
        index =  current -> next ;
        while (index ! = NULL ) {
            if (current -> data > index -> data ) {
            temp = current -> data ;
            current-> data =  index -> data ;
            index -> data = temp  ;
        }
        index = index -> next;
        }
        current = current -> next
}}}
```