

SLL OPERATIONS

```
void push(struct Node *head, int new-data) {  
    struct Node *ptr new-node = (struct Node *) malloc(sizeof (struct Node));  
    new-node → data = new-data;  
    new-node → next = NULL;  
    if (head == NULL)  
        head = new-node;  
    else {  
        new-node → next = head;  
        head = new-node;  
    }  
}
```

```
void append(struct Node *head, int new-data) {  
    struct Node *new-node = (struct Node *) malloc(sizeof (struct Node));  
    struct Node *last = head;  
    new-node → data = new-data;  
    new-node → next = NULL;  
    if (head == NULL) {  
        head = new-node;  
        return;  
    }  
    while (last → next != NULL)  
        last = last → next;  
    last → next = new-node;  
}
```

```
void pop(struct Node *head) {  
    struct Node *ptr = head;  
    if (head == NULL)  
        printf("Empty list");  
    else {  
        head = ptr → next;  
        ptr → next = NULL; free (ptr); } }
```

```
void reverse (struct Node *head) {  
    struct Node *next_ptr = NULL;  
    struct Node *prev = NULL;  
    struct Node *curr = head;  
    while (curr != NULL) {  
        next_ptr = curr -> next;  
        curr -> next = prev;  
        prev = curr;  
        curr = next_ptr;  
    }  
    head = ptr prev;  
}
```

```
struct Node * concat (struct Node *headref2, struct Node *headref3) {  
    struct Node *temp;  
    if (headref2 == NULL)  
        return head headref3;  
    else if (headref3 == NULL)  
        return headref2;  
    temp = headref2;  
    while (temp -> next != NULL) {  
        temp = temp -> next;  
    }  
    ptr -> link = headref3;  
    return headref2;  
}
```