

DATA STRUCTURES

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COURSE CODE : CSA0312

TOPIC : SINGLE LINKED LIST

SINGLE LINKED LIST :-

INPUT:-

```
#include <stdio.h>

#include <stdlib.h>

struct Node {
    int data;
    struct Node* next;
};

void printList(struct Node* node) {
    while (node != NULL) {
```

```

        printf("%d -> ", node->data);

        node = node->next;
    }

    printf("NULL\n");
}

void push(struct Node** head_ref, int new_data) {

    struct Node* new_node = (struct Node*) malloc(sizeof(struct Node));

    new_node->data = new_data;

    new_node->next = (*head_ref);

    (*head_ref) = new_node;
}

int main() {

    struct Node* head = NULL;

    push(&head, 3);

    push(&head, 2);

    push(&head, 1);

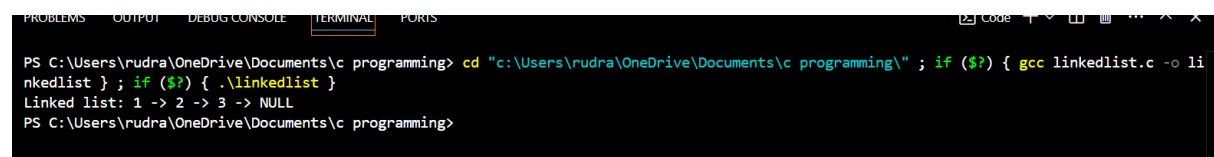
    printf("Linked list: ");

    printList(head);

    return 0;
}

```

OUTPUT:-



```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\rudra\OneDrive\Documents\c programming> cd "c:\Users\rudra\OneDrive\Documents\c programming\" ; if ($?) { gcc linkedlist.c -o linkedlist } ; if ($?) { .\linkedlist }
Linked list: 1 -> 2 -> 3 -> NULL
PS C:\Users\rudra\OneDrive\Documents\c programming>

```

