

DAILY ONLINE ACTIVITIES SUMMARY

Date:	15/06/2020	Name:	Mithun Kumar D
Sem & Sec	VIII Semester & A section	USN:	4AL16CS053
Online Test Summary			
Subject	SMS		
Max. Marks	60	Score	No mail received
Certification Course Summary			
Course	AWS DeepRacer: Driven by Reinforcement Learning		
Certificate Provider	AWS	Duration	90 minutes
Coding Challenges			
Problem Statement: C program to perform operations on triply linked list.			
Status: COMPLETED			
Uploaded the report in Github		YES	
If yes Repository name		mkd18	
Uploaded the report in slack		YES	

Certification Course Details:



Coding Challenges Details:

PROGRAM: To perform operations on triply linked list.

```
#include<stdlib.h>
#include <stdio.h>

void create(); void
display();
void insert_begin(); void
insert_end(); void
insert_pos(); void
delete_begin(); void
delete_end(); void
delete_pos();

struct node
{
    int info;
    struct node *next;
};
struct node *start=NULL; int main()
{
    int choice;
    while(1){

        printf("\n          MENU          \n");
        printf("\n 1.Create          \n");
        printf("\n 2.Display          \n");
        printf("\n 3.Insert at the beginning \n");
        printf("\n 4.Insert at the end  \n");
        printf("\n 5.Insert at specified position \n"); printf("\n
        6.Delete from beginning \ n"); printf("\n
        7.Delete from the end  \n"); printf("\n
        8.Delete from specified position  n");
```

```

printf("\n 9.Exit          \n");
printf("\n----- \n");
printf("\nEnter your choice:\t");
scanf("%d",&choice); switch(choice)
{
    case 1:
        create();
        break;
    case 2:
        display(); break;

    case 3:  insert_begin();
            break;

    case 4:  insert_end(); break;

            insert_pos(); break;
    case 5:
        delete_begin();
        break;
    case 6:
        delete_end();
        break;
    case 7:
        delete_pos();
        break;
    case 8:


    case 9:
        exit(0);
        break;

    default:

```

```

        printf("\n Wrong Choice:\n"); break;
    }
}
return 0;
}
void create()
{
    struct node *temp,*ptr;
    temp=(struct node *)malloc(sizeof(struct node)); if(temp==NULL)
    {
        printf("\nOut of Memory Space:\n"); exit(0);
    }
    printf("\nEnter the data value for the node:t");
    scanf("%d",&temp->info);
    temp->next=NULL;
    if(start==NULL)
    {
        start=temp;
    }
    else
    {
        ptr=start;
        while(ptr->next!=NULL)
        {
            ptr=ptr->next;
        }
        ptr->next=temp;
    }
}
void display()
{
    struct node *ptr;
    if(start==NULL)

```

```

    {
        printf("\nList is empty:\n"); return;
    }
else
{
    ptr=start;
    printf("\nThe List elements are:\n");
    while(ptr!=NULL)
    {
        printf("%d\t",ptr->info );
        ptr=ptr->next ;
    }
}
}

void insert_begin()
{
    struct node *temp;
    temp=(struct node *)malloc(sizeof(struct node)); if(temp==NULL)
    {
        printf("\nOut of Memory Space:\n"); return;
    }
    printf("\nEnter the data value for the node:t" );
    scanf("%d",&temp->info);
    temp->next =NULL;
    if(start==NULL)
    {
        start=temp;
    }
else
{
    temp->next=start;
    start=temp;
}
}

```

```

}
void insert_end()
{
    struct node *temp,*ptr;
    temp=(struct node *)malloc(sizeof(struct node)); if(temp==NULL)
    {
        printf("\nOut of Memory Space:\n"); return;
    }
    printf("\nEnter the data value for the node:t" );
    scanf("%d",&temp->info );
    temp->next =NULL;
    if(start==NULL)
    {
        start=temp;
    }
    else
    {
        ptr=start;
        while(ptr->next !=NULL)
        {
            ptr=ptr->next ;
        }
        ptr->next =temp;
    }
}

void insert_pos()
{
    struct node *ptr,*temp; int i,pos;
    temp=(struct node *)malloc(sizeof(struct node)); if(temp==NULL)
    {
        printf("\nOut of Memory Space:\n"); return;
    }

```

```

    }
    printf("\nEnter the position for the new node to be inserted:t"); scanf("%d",&pos);
    printf("\nEnter the data value of the node:t");
    scanf("%d",&temp->info) ;

    temp->next=NULL; if(pos==0)
    {
        temp->next=start;
        start=temp;
    }
    else
    {
        for(i=0,ptr=start;i<pos-1;i++) { ptr=ptr->next; if(ptr==NULL)
            {
                printf("\nPosition not found:[Handle with care]n"); return;
            }
        }
        temp->next =ptr->next ; ptr-
        >next=temp;
    }
}

void delete_begin()
{
    struct node *ptr;
    if(ptr==NULL)
    {
        printf("\nList is Empty:n"); return;
    }
    else
    {
        ptr=start;

```



```

        start=start->next ;
        printf("nThe deleted element is :%dt",ptr->info); free(ptr);
    }
}
void delete_end()
{
    struct node *temp,*ptr; if(start==NULL)
    {
        printf("nList is Empty:"); exit(0);
    }
    else if(start->next ==NULL)
    {
        ptr=start; start=NULL;
        printf("nThe deleted element is:%dt",ptr->info); free(ptr);

    }
    else ptr=start;
    {
        while(ptr->next!=NULL)
        {
            temp=ptr; ptr=ptr->next;
        }
        temp->next=NULL;
        printf("nThe deleted element is:%dt",ptr->info); free(ptr);
    }
}
void delete_pos()
{
    int i,pos;

```

```

struct node *temp,*ptr; if(start==NULL)
{
    printf("\nThe List is Empty:\n"); exit(0);
}
else
{
    printf("\nEnter the position of the node to be deleted:t"); scanf("%d",&pos);
    if(pos==0)
    {
        ptr=start; start=start-
        >next ;
        printf("\nThe deleted element is:%dt",ptr->info ); free(ptr);
    }
    else
    {
        ptr=start;
        for(i=0;i<pos;i++) { temp=ptr; ptr=ptr->next ; if(ptr==NULL)
            {
                printf("\nPosition not Found:\n"); return;
            }
        }
        temp->next =ptr->next ;
        printf("\nThe deleted element is:%dt",ptr->info ); free(ptr);
    }
}
}

```



```
exit(0); break;  
default:
```