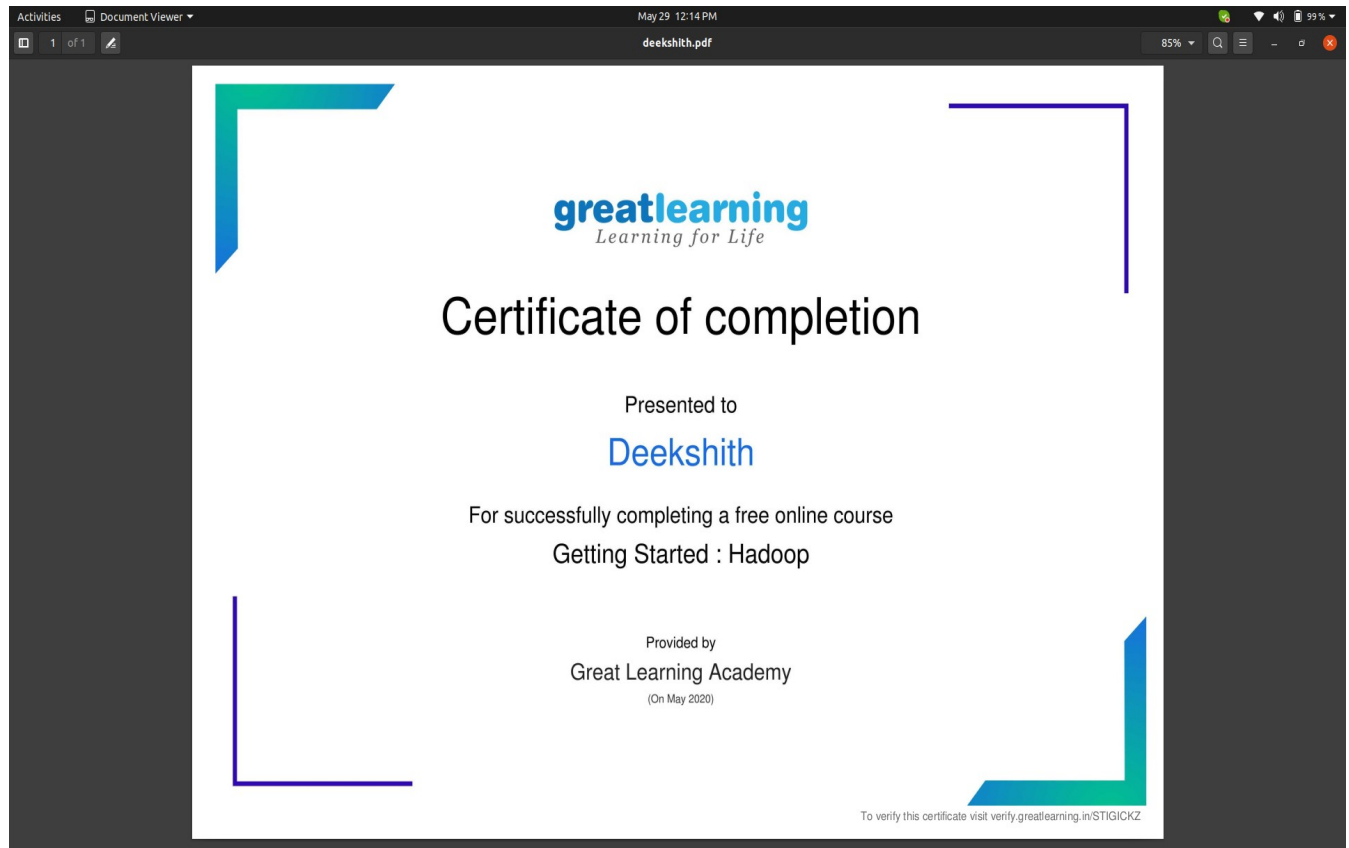


DAILY ONLINE ACTIVITIES SUMMARY

Date:	15/06/2020	Name:	Deekshith T R
Sem & Sec	8 th A	USN:	4AL16CS027
Online Test Summary			
Subject	SMS		
Max. Marks	--	Score	--
Certification Course Summary			
Course	Getting started Hadoop		
Certificate Provider	GreatLearning	Duration	5.5hr
Coding Challenges			
Problem Statement: Write a C Program to perform the following operations on Triply Linked List (TLL)			
Status: Completed			
Uploaded the report in Github		yes	
If yes Repository name		Deekshithtr_16cs027	
Uploaded the report in slack		yes	

Certification Course Details:



Coding Challenges Details:

program1:

/*C++ Program to Implement Triply Linked List*/

```
#include<iostream>
```

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

```
using namespace std;
```

```
int a = 0;
```

```
struct node
```

```
{
```

```
    node *next, *prev, *top;
```

```
    int info;
```

```
}*head = NULL, *tail = NULL, *p = NULL, *r = NULL, *np = NULL, *q = NULL;
```

```
void create(int z)
```

```
{
```

```
    np = new node;
```

```
    np->info = z;
```

```
    np->next = NULL;
```

```
    np->prev = NULL;
```

```
    np->top = NULL;
```

```
    if (a == 0)
```

```
    {
```

```
        tail = np;
```

```
        head = np;
```

```
        p = head;
```

```
        p->next = NULL;
```

```
        p->prev = NULL;
```

```
        p->top = NULL;
```

```
        a++;
```

```
    }
```

```

else
{
    p = head;
    r = p;
    if (np->info < p->info)
    {
        np->next = p;
        p->prev = np;
        np->prev = NULL;
        head = np;
        p = head;
        do
        {
            p = p->next;
        }
        while (p->next != NULL);
        tail = p;
    }
    else if (np->info > p->info)
    {
        while (p != NULL && np->info > p->info)
        {
            r = p;
            p = p->next;
        }
    }
}

```

```
if (p == NULL)
{
    r->next = np;
    np->prev = r;
    np->next = NULL;
    tail = np;
    break;
}
else if (np->info <= p->info)
{
    if (np->info < p->info)
    {
        r->next = np;
        np->prev = r;
        np->next = p;
        p->prev = np;
        if (p->next != NULL)
        {
            do
            {
                p = p->next;
            }
            while (p->next !=NULL);
        }
    }
}
```

}

ve

{

```

while (t != NULL)
{
    cout<<t->info<<"\t";

    q = t;
    while (q->top != NULL)
    {
        q = q->top;
        cout<<"top->"<<q->info<<"\t";
    }
    t = t->prev;
}
cout<<endl<<endl;
}

```

```

void traverse_head()
{
    node *t = head;
    while (t != NULL)
    {
        cout<<t->info<<"\t";

        q = t;
        while (q->top != NULL)
        {
            q = q->top;

```

```

        cout<<"top->"<<q->info<<"\t";

    }

    t = t->next;

}

cout<<endl<<endl;

}

int main()

{

    int c = 0, no, value, ch;

    cout<<"Please enter the number of nodes: "<<endl;

    cin>>no;

    while (c < no)

    {

        cout<<endl<<"Enter the value of node: "<<endl;

        cin>>value;

        create(value);

        c++;

    }

    cout<<endl<<"Traversing Doubly Linked List head: "<<endl;

    traverse_head();


    cout<<endl<<"Traversing Doubly Linked List tail: "<<endl;

    traverse_tail();

```


}