DAILY ONLINE ACTIVITIES SUMMARY

Date:	**20/05/2020**	**Name:**	**Prathiksha**
Sem & Sec	**8th sem & B sec**	**USN:**	**4AL16CS070**

Online Test Summary

Subject	**Introduction To Internet of Things(IOT)**		
Max. Marks	**30**	**Score**	**27**

Certification Course Summary

Course	**Introduction To Ethical Hacking**		
Certificate Provider	**Great Learning Academy**	**Duration**	**6hrs**

Coding Challenges

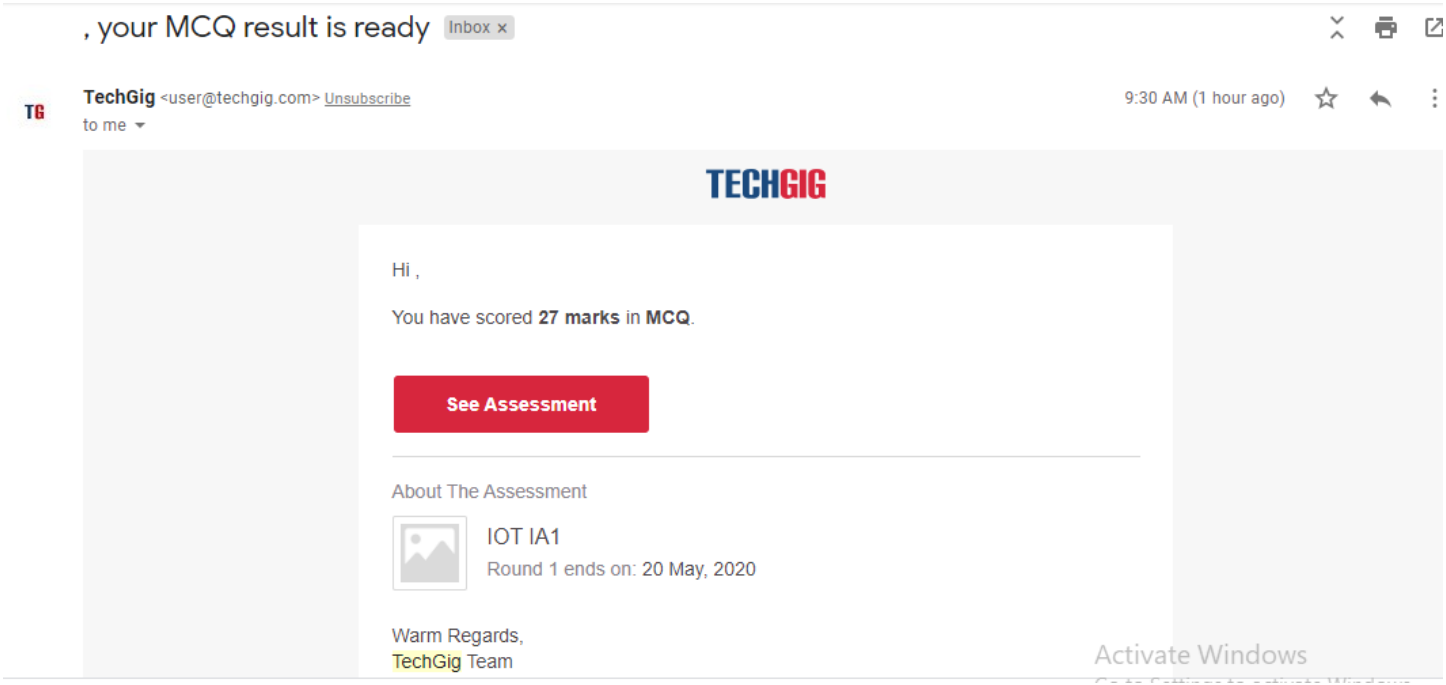
Problem Statement:

1. Write a C Program to Reverse a Linked List in groups of given size

Status: Solved

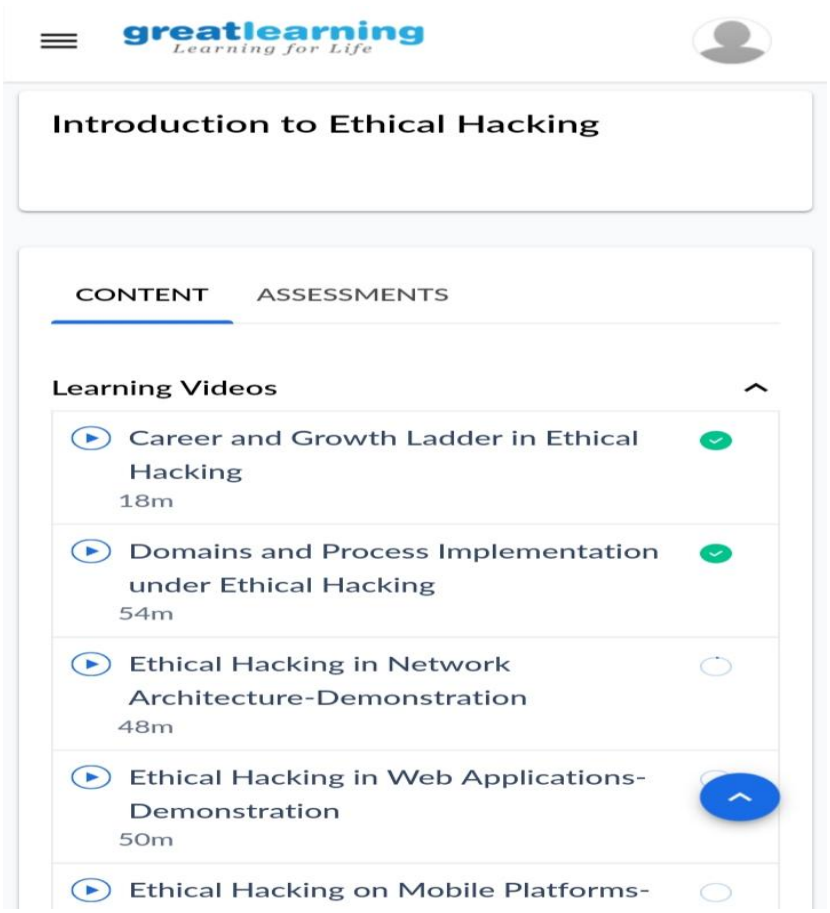
Uploaded the report in Github	**Yes**
If yes Repository name	**Prathiksha**
Uploaded the report in slack	**Yes**

Online Test Details:



IA1 portion was Module 1 and 2.

Certification Course Details:



Topic : Domains and progress implementation under ethical hacking.

Coding Challenges Details:

Program 1:

Test Case 1:
If a linked listis: 1 → 2 → 3 → 4 → 5 → 6 → 7 → 8
The value of size k is 2
Then the linked list looks like: 2 → 1 → 4 → 3 → 6 → 5 → 8 → 7

Test Case 2:
If a linked listis: 1 → 2 → 3 → 4 → 5 → 6 → 7 → 8
The value of size k is 3
Then the linked list looks like: 3 → 2 → 1 → 6 → 5 → 4 → 8 → 7

```
struct Node
{
int data;
struct Node* next;
};
pointer to the new head node. /
struct Node reverse (struct Node head, int k)
{
struct Node current = head;
struct Node next = NULL;
struct Node prev = NULL;
int count = 0;
while (current != NULL && count < k)
{
   next  = current->next;
   current->next = prev;
   prev = current;
   current = next;
   count++;
}

if (next !=  NULL)
  head->next = reverse(next, k);

return prev;
}
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;
```

```
}
void printList(struct Node *node)
{
while (node != NULL)
{
printf("%d ", node->data);
node = node->next;
}
}
int main(void)
{
struct Node* head = NULL;
push(&head, 8);
push(&head, 7);
push(&head, 6);
push(&head, 5);
push(&head, 4);
push(&head, 3);
push(&head, 2);
push(&head, 1);
 printf("\nGiven linked list \n");
 printList(head);
 head = reverse(head, 2);

 printf("\nReversed Linked list \n");
 printList(head);

 return(0);
```