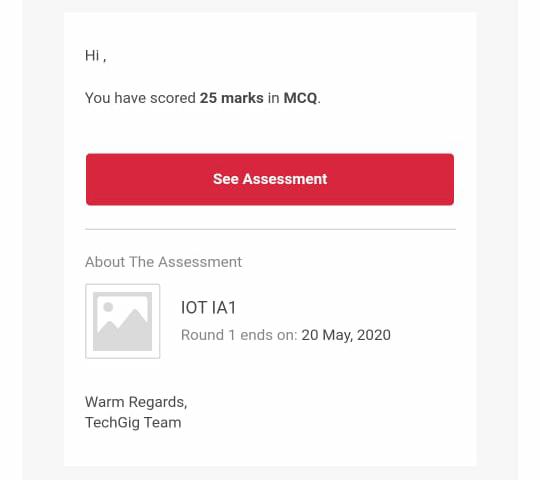
**DAILY ONLINE ACTIVITIES SUMMARY**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date:** | **20-05-2020** | | | | | **Name:** | **Dhanush Shetty** | |
| **Sem & Sec** | **8 A** | | | | | **USN:** | **4AL16CS032** | |
| **Online Test Summary** | | | | | | | | |
| **Subject** | | **IOT** | | | | | | |
| **Max. Marks** | | **30** | | **Score** | | | **25** | |
| **Certification Course Summary** | | | | | | | | |
| **Course** | **Introduction to Amazon Elastic Compute Cloud (EC2)** | | | | | | | |
| **Certificate Provider** | | | **AWS** | | **Duration** | | | **10 mins** |
| **Coding Challenges** | | | | | | | | |
| **Problem Statement:**   1. **Genrating Armstrong numbers using Python** 2. **Write a C Program to Reverse a Linked List in groups of given size.**   **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** | | | | | | | | |
| **Status: Solved** | | | | | | | | |
| **Uploaded the report in Github** | | | | | **Yes** | | | |
| **If yes Repository name** | | | | | **Dhanushshett/online\_java\_coding\_repository** | | | |
| **Uploaded the report in slack** | | | | | **Yes** | | | |

Online Test Details: (Attach the snapshot and briefly write the report for the same)



Certification Course Details: (Attach the snapshot and briefly write the report for the same)



Coding Challenges Details: (Attach the snapshot and briefly write the report for the same)

**PROGRAM 1: generating Armstrong numbers using Python programming language.**

num = int(input("Enter a number: "))

sum = 0

temp = num

**while** temp > 0:

   digit = temp % 10

   sum += digit \*\* 3

   temp //= 10

**if** num == sum:

**print**(num,"is an Armstrong number")

**else**:

**print**(num,"is not an Armstrong number")

**PROGRAM 2: Write a C Program to Reverse a Linked List in groups of given size.**

**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);

}