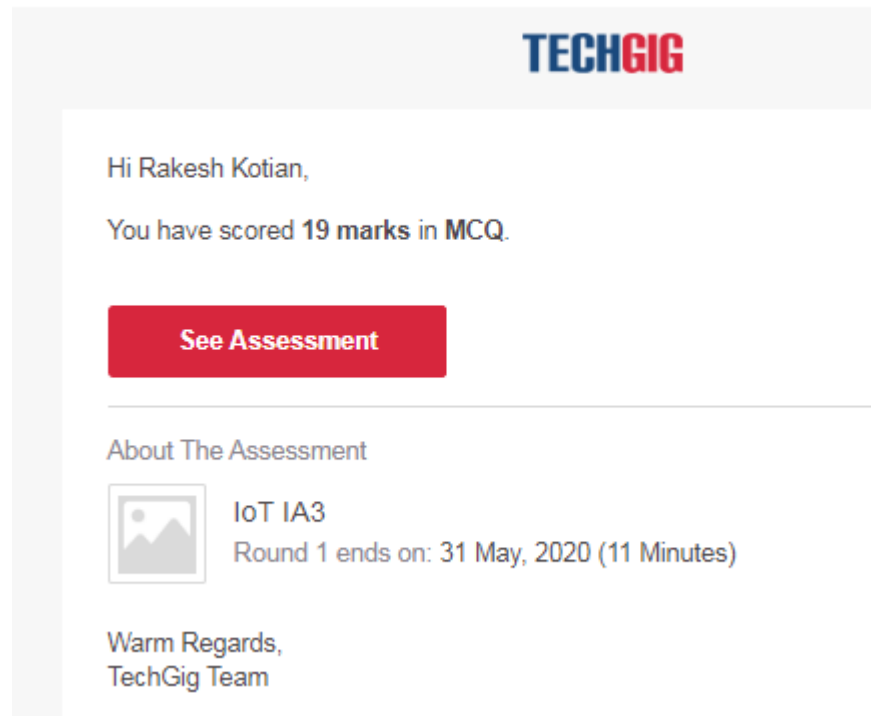


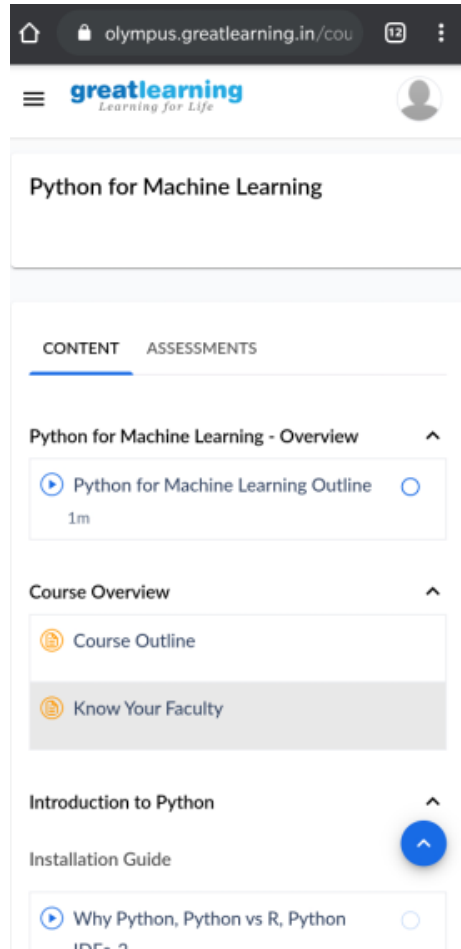
DAILY ONLINE ACTIVITIES SUMMARY

Date:	31-05-2020	Name:	Rakesh M Kotian
Sem & Sec	8 th sec-b	USN:	4al16cs072
Online Test Summary			
Subject	iot		
Max. Marks	20	Score	19
Certification Course Summary			
Course	Python for machine learning		
Certificate Provider	Great learning	Duration	6 hours
Coding Challenges			
Problem Statement:			
Status:solved			
Uploaded the report in Github		yes	
If yes Repository name		Rakeshkotian08	
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)

Micro purchased an array A having N integer values. After playing it for a while, he got bored of it and decided to update value of its element. In one second he can increase value of each array element by 1 . He wants each array element's value to become greater than or equal to K . Please help Micro to find out the minimum amount of time it will take, for him to do so.

Input:

First line consists of a single integer, T , denoting the number of test cases. First line of each test case consists of two space separated integers denoting N and K . Second line of each test case consists of N space separated integers denoting the array A .

Output:

For each test case, print the minimum time in which all array elements will become greater than or equal to K . Print a new line after each test case.

Constraints:

$$1 \leq T \leq 5$$

$$1 \leq N \leq 105$$

$$1 \leq A[i], K \leq 106$$

```
#include<stdio.h>
int main()
{
    int t,n,i,min=10000000000,k;
    scanf("%d",&t);
    while(t--)
    {
        min=100000000000;
        scanf("%d%d",&n,&k);
        int a[n];
        for(i=0;i<n;i++)
        {
            scanf("%d",&a[i]);
            if(a[i]<min)
                min=a[i];
        }
        //printf("%d ",min);
        if(min>=k)
            printf("0\n");
        else
            printf("%d\n",k-min);
        }
    return 0;
}
```