DAILY ONLINE ACTIVITIES SUMMARY
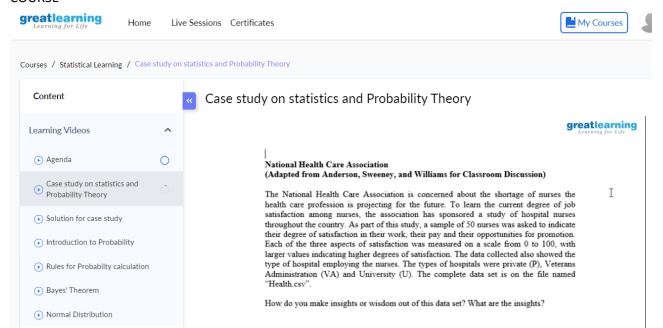
Date:	10-6-20		Name:	Pragathi h d
Sem & Sec	8 sem B sec		USN:	4AL16CS066
Online Test Summary				
Subject				
Max. Marks			Score	
Certification Course Summary				
Course	Ethical hacking			
Certificate Provider	Learning academy		Duration	5.00hrs
Coding Challenges				
Problem Statement: merge sort				
Status: Solved				
Uploaded the report in Github			Uploaded	
If yes Repository name			Pragathijain	
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)

COURSE

Courses / **Statistical Learning** / Case study on statistics and Probability Theory

Content

« **Case study on statistics and Probability Theory**

Learning Videos ︿

▶ Agenda ○

▶ Case study on statistics and Probability Theory

▶ Solution for case study

▶ Introduction to Probability

▶ Rules for Probabilty calculation

▶ Bayes' Theorem

▶ Normal Distribution

greatlearning
Learning for Life

National Health Care Association
(Adapted from Anderson, Sweeney, and Williams for Classroom Discussion)

The National Health Care Association is concerned about the shortage of nurses the health care profession is projecting for the future. To learn the current degree of job satisfaction among nurses, the association has sponsored a study of hospital nurses throughout the country. As part of this study, a sample of 50 nurses was asked to indicate their degree of satisfaction in their work, their pay and their opportunities for promotion. Each of the three aspects of satisfaction was measured on a scale from 0 to 100, with larger values indicating higher degrees of satisfaction. The data collected also showed the type of hospital employing the nurses. The types of hospitals were private (P), Veterans Administration (VA) and University (U). The complete data set is on the file named "Health.csv".

How do you make insights or wisdom out of this data set? What are the insights?

Coding

```python
def
merge(arr,
l, m, r):
            n1 = m - l + 1
            n2 = r- m
            L = [0] * (n1)
            R = [0] * (n2)
            for i in range(0 , n1):
                L[i] = arr[l + i]

            for j in range(0 , n2):
                R[j] = arr[m + 1 + j]

            i = 0
            j = 0
            k = l

            while i < n1 and j < n2 :
                if L[i] <= R[j]:
                    arr[k] = L[i]
                    i += 1
```

```python
        else:
            arr[k] = R[j]
            j += 1
        k += 1
    while i < n1:
        arr[k] = L[i]
        i += 1
        k += 1
    while j < n2:
        arr[k] = R[j]
        j += 1
        k += 1
def mergeSort(arr,l,r):
    if l < r:
        m = (l+(r-1))//2
        mergeSort(arr, l, m)
        mergeSort(arr, m+1, r)
        merge(arr, l, m, r)
arr = [12, 11, 13, 5, 6, 7]
n = len(arr)
print ("Given array is")
for i in range(n):
    print ("%d" %arr[i]),

mergeSort(arr,0,n-1)
print ("\n\nSorted array is")
for i in range(n):
    print ("%d" %arr[i]),
```