DAILY ONLINE ACTIVITIES SUMMARY

Date:	10/06/2020	Name:	Manoj L
Sem & Sec	8ᵗʰ sem	USN:	4AL16CS125

Online Test Summary			
Subject	-		
Max. Marks	-	Score	-

Certification Course Summary			
Course	Data Science and Machine Learning Bootcamp		
Certificate Provider	Udamy	Duration	42 hrs

Coding Challenges

Problem Statement:
   1. Implement Heap Sort Java Program Using Array.

Status: Solved

Uploaded the report in Github	Yes
If yes Repository name	Manoj_L
Uploaded the report in slack	Yes

Certification Cource

Coding Challenges Details:

Program 1: public class HSort

```
{
 public static void heapify(int a[],int i,int n)
{
int l=2*i+1;
int r=2*i+2;
int temp,largest;
if(l<n && a[l]>a[i])
largest=l; else
 largest=i;
   if(r<n && a[r]>a[largest])
 largest=r;
 if(largest !=i)
{ temp=a[largest];
a[largest]=a[i];
 a[i]=temp;
  heapify(a,largest,n);
}
}
```

```java
public static void bheap(int a[])
{
for(int i=(a.length/2)-1;i>=0;i--)
{
   heapify(a,i,a.length);
} }

public static void Sort(int a[])
{  int
temp,j,i;
 bheap(a);
for( i=(a.length)-1; i>0;)
{ temp=a[0];
a[0]=a[i];
a[i]=temp;
heapify(a,0,i--) ;
 } }
public static void printarray(int a[])
{
System.out.println(); for(int i=0;
i < a.length; i++)
{
System.out.print(a[i]+" ");
}
}
public static void main(String[] args)
{
 int n,res,i;
Scanner s = new Scanner(System.in);
System.out.print("Enter number of elements in the array:"); n =
s.nextInt(); int a[] = new int[n];
System.out.println("Enter "+n+" elements ");
for( i=0; i < n; i++)
{
a[i] = s.nextInt();
}
System.out.println( "elements in array "); printarray(a);
Sort(a);
System.out.println( "\nelements after sorting"); printarray(a);
}
}
```