**DAILY ONLINE ACTIVITIES SUMMARY**

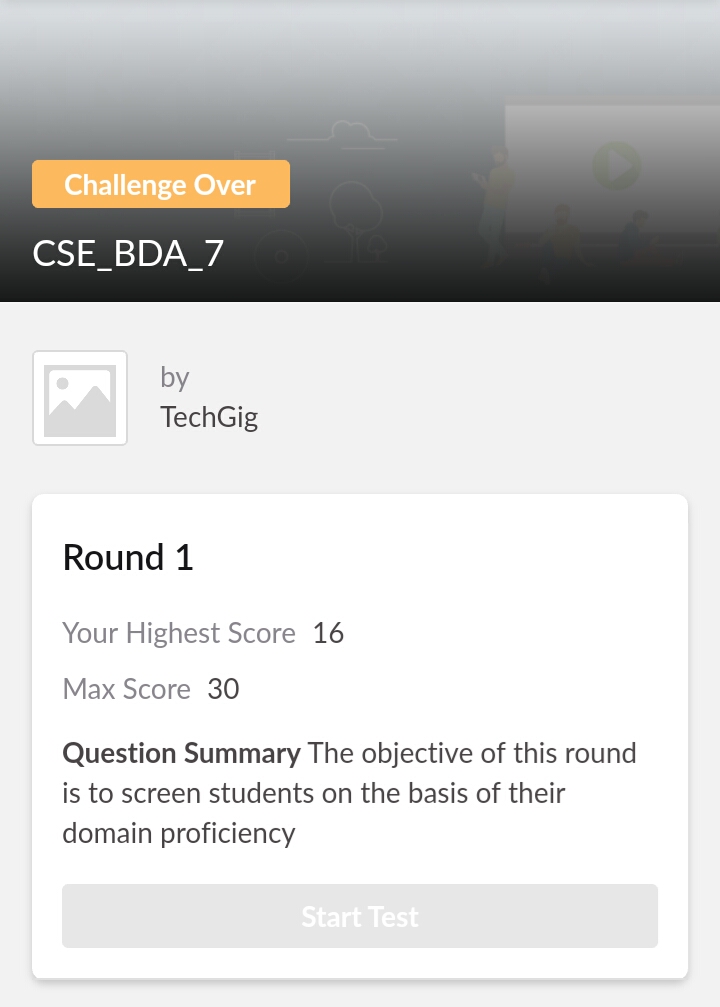
|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date:** | **12-6-2020** | | | | | **Name:** | **Prajna** | |
| **Sem & Sec** | **8th sem ‘B’** | | | | | **USN:** | **4AL16CS067** | |
| **Online Test Summary** | | | | | | | | |
| **Subject** | | **BDA** | | | | | | |
| **Max. Marks** | | **30** | | **Score** | | | **16** | |
| **Certification Course Summary** | | | | | | | | |
| **Course** | **Introduction to R programming** | | | | | | | |
| **Certificate Provider** | | | **Eduonix** | | **Duration** | | | **2hrs** |
| **Coding Challenges** | | | | | | | | |
| **Problem Statement:**1**.** Write a python program for heap sort. | | | | | | | | |
| **Status: Completed** | | | | | | | | |
| **Uploaded the report in GitHub**  **GitHub link:** | | | | | **Yes**  **https://github.com/alvas-education-foundation/prajna\_k** | | | |
| **If yes Repository name** | | | | | **prajna\_k** | | | |
| **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)

1)online test



2) certification course



3) coding challenges

Program 1

def heap\_data(nums, index, heap\_size):

largest\_num = index

left\_index = 2 \* index + 1

right\_index = 2 \* index + 2

if left\_index < heap\_size and nums[left\_index] > nums[largest\_num]:

largest\_num = left\_index

if right\_index < heap\_size and nums[right\_index] > nums[largest\_num]:

largest\_num = right\_index

if largest\_num != index:

nums[largest\_num], nums[index] = nums[index], nums[largest\_num]

heap\_data(nums, largest\_num, heap\_size)

def heap\_sort(nums):

n = len(nums)

for i in range(n // 2 - 1, -1, -1):

heap\_data(nums, i, n)

for i in range(n - 1, 0, -1):

nums[0], nums[i] = nums[i], nums[0]

heap\_data(nums, 0, i)

return nums

user\_input = input("Input numbers separated by a comma:\n").strip()

nums = [int(item) for item in user\_input.split(',')]

heap\_sort(nums)

print(nums)

|  |
| --- |
|  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |