

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

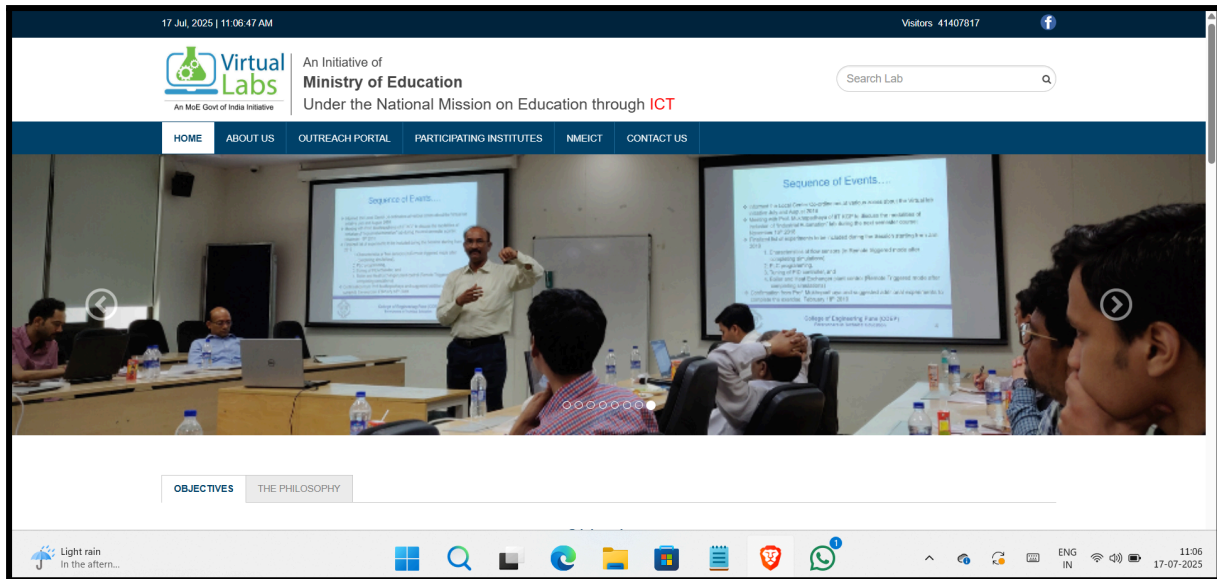
M.Tech. I Year III Term

Assignment

Name	Mallareddy Durga Nagendra Akash
Id.No	241P1R1005
Branch	CSE
Year and Term	1st Year 3rd Term
Course Name	Research and Publication Ethics
Instructor Name	Dr. Maheshprabhu R, Professor, Dept of CSE
Assessment Type	Assignment
Module Number	2

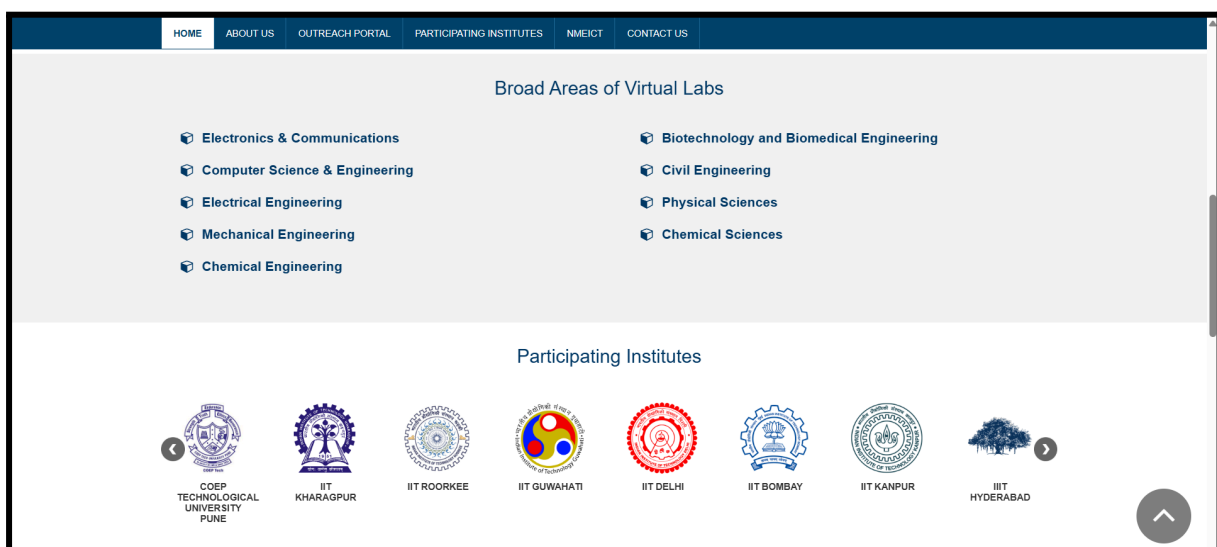
Virtual Labs Walkthrough

Step 1: Open Virtual Labs Website [<https://www.vlab.co.in/>]

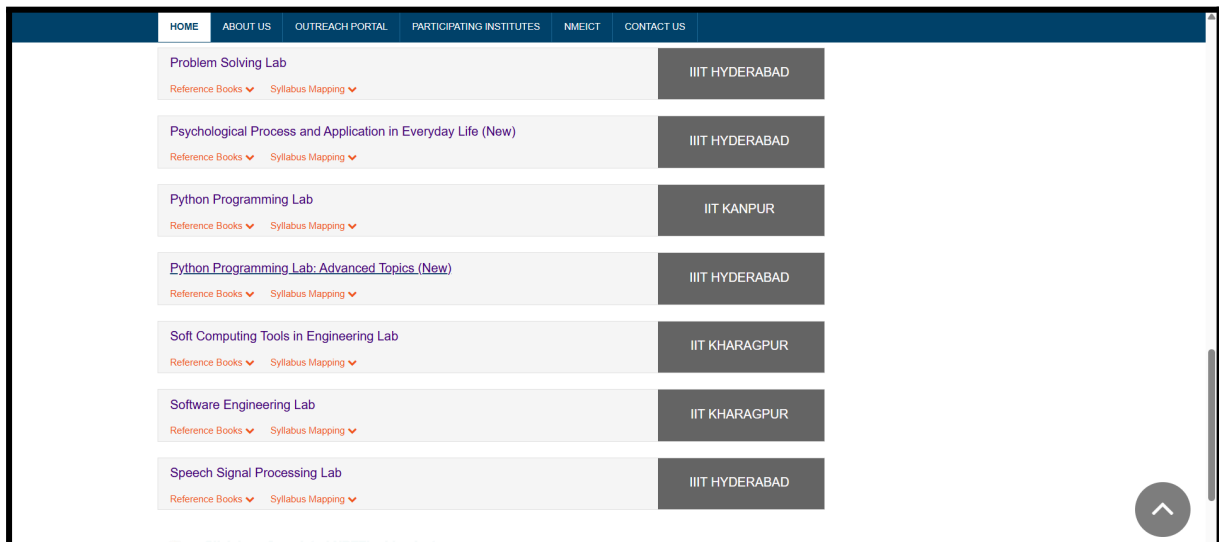


Step 2: Select Computer Science & Engineering

[<https://www.vlab.co.in/broad-area-computer-science-and-engineering>]

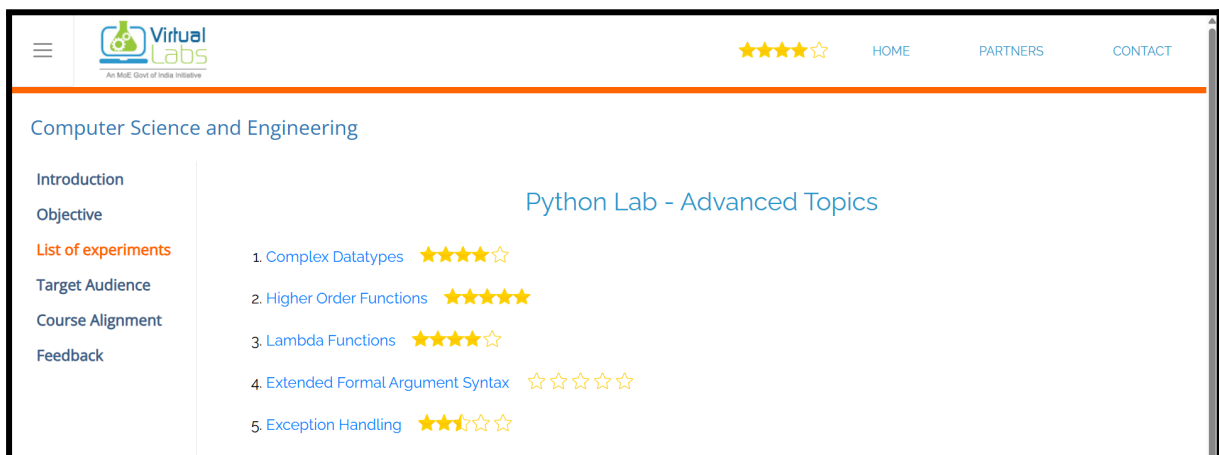


Step 3: Select Python Programming Lab - Advanced Topics [<https://python-iiith.vlabs.ac.in/>]



Step 4: Open List of Experiments

[<https://python-iiith.vlabs.ac.in/List%20of%20experiments.html>]



Step 5: Experiment 1: Complex Datatypes

[<https://python-iiith.vlabs.ac.in/exp/complex-datatypes/simulation.html>]

Complex Datatypes

Let's learn Complex Data Types!

Select Data Type
List

Select learning mode
Learn

Objective

Make a program that modifies the list given below to display numbers from 1 to 8 in descending order.

Input List is:
list = [1, 3, 6, 5, 2, 4, 7, 17]

Final List required is:
list = [8, 7, 6, 5, 4, 3, 2, 1]

Complete the program

```
>>> list.  
>>> list.  
>>> list.  
>>> list.
```

pop() remove(8) append(8)
reverse() insert(0, 8) sort()

Submit Reset

Step 6: Experiment 2: Higher Order Functions

[<https://python-iiith.vlabs.ac.in/exp/higher-order-functions/simulation.html>]

Higher Order Functions

Function as a parameter | Function as a return value

Let's learn Higher Order Functions!

Drag and drop the options to the blanks to complete the program to form a function that takes in a function as parameter.

The goal of this function will be to take a list of strings, a string function and a list function as arguments. Then it will apply the string function to each string in the list and apply the list function to the whole list.

Input = ['hello', 'this', 'is', 'a', 'list']
Output = ['A', 'HELLO', 'IS', 'LIST', 'THIS']

Complete the program

```
>>> def HigherOrderFunction(list, stringFunc, listFunc):  
    for i in range(len(list)):  
        list[i] =   
    return   
  
>>> input = ["hello", "this","is", "a", "list"]  
>>> output = HigherOrderFunction(input, , )  
>>> print(output)
```

stringFunc(list[i]) str.upper list.sort
listFunc(list) lambda x: sorted(x)
list[i].stringFunc()

Submit

