Course outline

How does an NPTEL online course work? ()

Week 1 : Introduction ()

Week 1 Quiz ()

Week 2: Basics of Python ()

Week 2 Quiz ()

Week 2 Programming Assignment ()

Week 3: Lists, inductive

Online Test 2, Question 3

Due on 2021-03-09, 22:00 IST

Question 3

Here is a function to compute the third largest value in a list of **distinct integers**. All the integers are guaranteed to be positive. You have to fill in the missing lines. You can assume that there are at least three numbers in the list.

```
def thirdmax(l):
  (mymax,mysecondmax,mythirdmax) = (0,0,0)
  for i in range(len(l)):
  # Your code below this line


  # Your code above this line
  return(mythirdmax)
```

Open up the code submission box below and fill in the gap in the code. Ensure that you maintain correct indentation.

Sample Test Cases

	Input	Output
Test Case 1	`thirdmax([10,20,30,40])`	20
Test Case 2	`thirdmax([10,1,8,2,0])`	2
Test Case 3	`thirdmax([13,12,2,17,3,6,8,5,18,16,22])`	17
Test Case 4	`thirdmax([3,1,2])`	1

function definitions, sorting ()

Week 3 Programming Assignment ()

Week 4: Sorting, Tuples, Dictionaries, Passing Functions, List Comprehension ()

Week 4 Quiz ()

Week 4 Programming Assignment ()

Week 5: Exception handling, input/output, file handling, string processing ()

Week 5 Programming Assignment ()

Week 6: Backtracking, scope, data structures; stacks, queues and heaps ()

Week 6 Quiz ()

Test Case 5	`thirdmax([4,1,3,2])`	2
Test Case 6	`thirdmax([13,12,2,17,3,6,8,5])`	12

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment.

Sample solutions (Provided by instructor)

```
def thirdmax(l):
  (mymax,mysecondmax,mythirdmax) = (0,0,0)
  for i in range(len(l)):
  # Your code below this line

    if l[i] > mymax:
      (mymax,mysecondmax,mythirdmax) = (l[i],mymax,mysecondmax)
    elif l[i] > mysecondmax:
      (mysecondmax,mythirdmax) = (l[i],mysecondmax)
    elif l[i] > mythirdmax:
      mythirdmax = l[i]

  # Your code above this line
  return(mythirdmax)
import ast

def tolist(inp):
  inp = ast.literal_eval(inp)
  return(inp)

fncall = input()
lparen = fncall.find("(")
rparen = fncall.rfind(")")
fname = fncall[:lparen]
farg = fncall[lparen+1:rparen]

if fname == "thirdmax":
  arg = tolist(farg)
  print(thirdmax(arg))


```

- **Week 7: Classes, objects and user defined datatypes ()**
- **Week 7 Quiz ()**
- **Week 8: Dynamic programming, wrap-up ()**
- **Week 8 Programming Assignment ()**
- **Text Transcripts ()**
- **Books ()**
- **Download Videos ()**
- **Online Programming Test - Sample ()**
- **Online Programming Test 1, 01 Dec 2020, 10:00-12:00 ()**
- **Online Programming Test 2, 01 Dec 2020, 20:00-22:00 ()**
- **Online Programming Test 1, 09 Mar 2021, 10:00-12:00 ()**

Online Programming Test 2, 09 Mar 2021, 20:00-22:00 ()

- Online Test 2, Question 1 (/noc20_cs26/progassignment?name=160)
- Online Test 2, Question 2 (/noc20_cs26/progassignment?name=161)
- **Online Test 2, Question 3 (/noc20_cs26/progassignment?name=162)**
- Online Test 2, Question 4 (/noc20_cs26/progassignment?name=163)
- Online Test 2, Question 5 (/noc20_cs26/progassignment?name=164)
- Online Test 2, Question 6 (/noc20_cs26/progassignment?name=165)
- Online Test 2, Question 7 (/noc20_cs26/progassignment?name=166)
- Online Test 2, Question 8 (/noc20_cs26/progassignment?name=167)