



NPTEL

rajeshborate08@gmail.com ▼

Courses » Programming, Data Structures and Algorithms using Python

Announcements

Course

Ask a Question

Progress

FAQ



Unit 15 - Week 6 Quiz



YOUTUBE

Register for
Certification exam

Course outline

How to access
the portalWeek 1:
Introduction

Week 1 Quiz

Week 2: Basics
of Python

Week 2 Quiz

Week 2
Programming
AssignmentWeek 3: Lists,
inductive
function
definitions,
sortingWeek 3
Programming
AssignmentWeek 4: Sorting,
Tuples,
Dictionaries,
Passing
Functions, List
Comprehension

Week 4 Quiz

Week 4
Programming
AssignmentWeek 5:
Exception
handling,
input/output, file

Week 6 Quiz

The due date for submitting this assignment has passed. **Due on 2019-03-13, 23:59 IST.** As per our records you have not submitted this assignment.

All questions carry equal weightage. All Python code is assumed to be executed using Python3. You may submit as many times as you like within the deadline. Your final submission will be graded.

Note:

- If the question asks about a value of type `string`, remember to enclose your answer in single or double quotes.
- If the question asks about a value of type `list`, remember to enclose your answer in square brackets and use commas to separate list items.

1) Suppose u and v both denote sets in Python. Under what condition can we guarantee that $u - (u - v) == v$? **2.5 points**

- ☐ The sets u and v should be disjoint.
- ☐ The set u should be a subset of the set v
- ☐ The set v should be a subset of the set u
- ☐ This is true for any u and v .

No, the answer is incorrect.

Score: 0

Feedback:

$u - (u - v)$ is effectively u intersection v . If this is equal to v , it means that v is a subset of u .

Accepted Answers:

The set v should be a subset of the set u

2) Suppose u and v both denote sets in Python. Under what condition can we guarantee that $u|v == u \wedge v$? **2.5 points**

- ☐ The sets u and v should be disjoint.
- ☐ The set v should be a subset of the set u
- ☐ The set u should be a subset of the set v
- ☐ This is true for any u and v .

No, the answer is incorrect.

Score: 0

Feedback:

The condition implies that each element in the union of u and v occurs in exactly one of the two sets, so the two sets must be disjoint.

Accepted Answers:

The sets u and v should be disjoint.

3) Suppose we insert 97 into the max heap $[98, 67, 89, 38, 42, 54, 89, 17, 25]$. What is the resulting heap?

handling, string
processing

Week 5
Programming
Assignment

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

Week 6 Quiz

☐ Quiz : Week 6
Quiz

Week 7: Classes,
objects and user
defined
datatypes

Week 7 Quiz

Week 8: Dynamic
programming,
wrap-up

Week 8
Programming
Assignment

Download

Text Transcripts

No, the answer is incorrect.

Score: 0

Feedback:

Execute heap insert and check.

Accepted Answers:

(Type: Regex Match) `[]*[[]*98,[]*97,[]*89,[]*38,[]*67,[]*54,[]*89,[]*17,[]*25,[]*42[]*[]*`

2.5 points



4) Suppose we we apply delete_max() twice to the heap [100, 97, 93, 38, 67, 54, 93, 17, 25, 42].
What is the resulting heap?

No, the answer is incorrect.

Score: 0

Feedback:

Execute delete_max() and check

Accepted Answers:

(Type: Regex Match) `[]*93,[]*67,[]*93,[]*38,[]*42,[]*54,[]*25,[]*17[]*[]*`

2.5 points



[YOUTUBE](#)



End

© 2014 NPTEL - Privacy & Terms - Honor Code - FAQs -

A project of



In association with



Funded by

Government of India
Ministry of Human Resource Development

Powered by

