
Department of Computer Science and Engineering
PES University, Bangalore, India

# Lecture Notes
# Python for Computational Problem Solving
# UE23CS151A

***Lecture #37***

***Problem solving using sets***

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# Programs on sets

## Solutions are available in this link:

https://drive.google.com/file/d/1_b_wAGcQMRhVLEXU9-q3DJoxVOML6pPx/view?usp=share_link

1. Create an empty set. Add n integers to it and display the set.
2. Create an empty set. Add n tuples to it each having 3 elements in a tuple and display the set.
3. Create a set of numbers from 2 to n(inclusive). Print the square of every number on the terminal.
4. Take an input string from the user and display the unique words in it line by line
5. Create a set by adding n elements from the user. If the user has not added any element to the set, how to check whether the set is empty or not. Print accordingly.
6. Create two empty sets. Take m and n as the input from the user as the number of elements to be added to both the sets respectively. Add m integers to set1 and add n integers to set2. Find the Cartesian product of two sets and display it.
8. Take two strings from the user. Display the common words in both. If no common words, print appropriate message.
9. Given a list of integers, display the count of all integers in that list.
10. Generate all prime numbers between 2 and n(inclusive) using the sieve of Eratosthenes method.
11. Given a set of elements, check whether any of the elements is an empty data structure. Display the message accordingly.
12. Two sets have the names of students who took part in two hackathons. I would like to get the list of students who took part in only the first hackathon. Provide the list.

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