Chapter 13 - Advanced Python 2

Virtual Environment
An environment which is same as the system interpretor but is isolated from the other python environments on the system.

Installation
To use virtual environments, we write

pip install virtualenv → Install the package

We create a new environment using:

Virtualenv myprojectenv - creates a new venv

The next step after creating the virtual environment is to activate it:
We can now use this virtual environment as a separate python installation.

pip freeze returns all the packages installed in a given python environment along with the versions

pip freeze > requirements txt

The above command creats a file named requirements tot in the same directory containing the output of pip freeze.

We can distribute this file to other users and they can recreate the same environment using:

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	pip install - r requirements ext
9	Lambda functions functions created using an expression using lambda keyword Curlor:
	functions Created using an expression using lambda
100	Reyword
	Syntax:
	lambda arguments: expressions
	Syntax: lambda arguments: expressions
	Example:
	Square = lambda x: x*x Square (6) -> returns 36
	Square (6) -> returns 36
	Sum = lambda a, b, c: a+b+c
	Sum (1, 2, 3) -> returns 6
	June () 2) 3) The state of the
	hin method (Strings)
	bin method (Strings) Creates a String from iterable objects
	MAN DE LANGE MAN MAN DE LA NOME DELA NOME DE LA NOME DELA NOME DE LA NOME DELA NOME DE LA NOME DELA NOME DE LA NOME DELA NOME DELA NOME DELA NOME DELA NOME DELA NOME DELA NOME
	l = ["apple", "mango", "banane"]
	personal and desired the court of ISI of contract and the
	"and," join (l)
	The above line will return apple, and, mango, and, banana"
	restant address a same
	format method (Strings)
1	format method (Strings) formats the values inside the string into a desired
	output
	template format (p, p2) arguments
	menoner when to so not the
-	I the lanction computer sum of two numbers and to
	MICE COUNTRY OF THE PARTY OF TH

Syntax for format looks like:
" { 3 is a good { 3" · format ("Harry", "boy") -0
I AMMADAME STRAIGHT INTO THE PARTICIPATION TO THE STRAIGHT
" { 1} is a good { 0} · format ("Harry", "tog") - 3
The state of the s
Output for D day
Markey is a good boy
MANUAL INCAMANA
Outbut for @xxx x admin = manor
Output for 3 boy is a good Harry
109 12 the grade lawy
Map, Filter & Reduce Map applies a function to all the items in an input-list
Mah abblic a function to all the items in an
· I L I L I L
Input_list
C. to a lan be lambda function
syman.
Syntax: Can be lambda function Map (function, input list)
CII + 1:1 1 have been which the function
tilter creates a list of 170ms for which the function
Filter creates a list of items for which the function returns true.
list (filter (function))
list (filter (function)) List (filter (function)) List (filter (function)) List (filter (function))
Hermat method (Stunge)
Reduce applies a rolling computation to sequential pair
Reduce applies a rolling computation to sequential pair of elements
The state of the s
from functools import reduce val = reduce (function, list1) Le can be a lambda function
Val = reduce (function lists)
La can be a lambda function
If the Graction Combuter Gum of his numbers and the
If the function computes sum of two numbers and the

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	Chapter 13 - Practice Set
	Chapter 1
1	Create to virtual environments, Install few packages
- 1	the first one. How do you create it similar
	Create two virtual environments, install few packages in the first one. How do you create a similar environment in the second one?
	Write a program to input name, marks and phone number of a student and format it using the format function like below:
2	Write a program to input name, mount it using
- 1	shore number of a student wind joined
	the format function like below.
	The name of the student is Harry, his marks are 72 and phone number is 99999888"
	The name of the student 15 99999888"
	and phone number 13
0	A lif contains the multiplication table of 7. Write
3	a program to convert it to a vertical String
	A list contains the multiplication table of 7. Write a program to convert it to a vertical string of same numbers (7)
	1 Cu a lit at anyment which
4	Write a program to filter a list of numbers which are divisible by 5
-	are divisible by 5
	Write a program to find the maximum of the numbers in a list using the reduce function.
5	write ne program of list using the reduce function.
	THUTWO'S THE ME 1988
6	Run bib freeze for the system interpretor. Take
"	Run pip freeze for the system interpretor. Take the contents and create a Similar Virtualen.
	I CHAPA
7	Explore the flask module and create a were
	Explore the Flask module and create a web server using Flask & Python.

Project 3 - Student Library Implement a Student library System using OOPs where Students can borrow a book from the list of books. Create a separate Library and Student class. Your program must be menu driven. You are free to choose methods and attributes of your choice to implement this functionality.