

<div>One Step In Changing Education Chain...</div> <div><b>RED &amp; WHITE</b></div> <div>GROUP OF INSTITUTE</div>										FACULTY NAME																														
										STARTING DATE		D	D	-	M	M	-	Y	Y	GRID																				
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STUDENT NAME																					GOOGLE CLASSROOM CODE																			
ADVANCE PYTHON																				TOTAL DAYS: ____ / 92																				
LEC.	TOPIC	DATE	P/A	DAY	FEEDBACK	STU. SIGN	FACULTY SIGN																																	
1	<b>OS &amp; SUBPROCESS MODULE</b> - Basic terminal commands - os module - subprocess module with call() & Popen()				<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>	A	B	C	D																															
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3	____/10																																							
PR1	Executor			3	____/10																																			
2	<b>MULTITHREADING &amp; EMAIL</b> - What is thread in a process? - threading module - Working of email sending through Internet - smtplib module - email package				<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>	A	B	C	D																															
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C	D																																							
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PR2	Multi-threader & Mailer			3	____/10																																			
3	<b>ITERATORS, GENERATORS &amp; CLOSURES</b> - __iter__() & __next__() - iter() & next() - yield keyword - Generator Function - Generator Object - global, local & nonlocal variables				<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>	A	B	C	D																															
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PR3	UDL			1	____/10																																			
4	<b>HIGHER ORDER FUNCTIONS</b> - sorted(), map(), reduce() & filter()  <b>DECORATORS</b> - Simple Decorator - Chaining Decorator - @classmethod & @staticmethod - property() & @property				<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>	A	B	C	D																															
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C	D																																							
3	____/10																																							
PR4	Fast Food Maker			1	____/10																																			
5	<b>VIRTUAL ENVIRONMENT</b> - virtualenv - venv - requirements.txt - pipenv				<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>	A	B	C	D																															
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E1	Viva and Examination			1	____/10																																			
6	<b>WORKING WITH EDITORS &amp; IDLE</b> - Sublime Text 3 - VS Code - Anaconda Navigator - PyCharm IDE  <b>DATA ANALYSIS WITH NUMPY</b> - NumPy library - NumPy Datatypes - Array Indexing - Array Math & Broadcasting - 1D & 2D Array - Arithmetic Operations on 2D Array				<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>	A	B	C	D																															
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PR5	NumPy Analyzer			3	____/10																																			
7	<b>HOT MODULES OF PYTHON</b> - qrcode mlibrary - pyinstaller library - csv module				<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>	A	B	C	D																															
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PR6	Hunter			6	___/10						
8	<b>DATA ANALYSIS WITH PANDAS</b> - Pandas Library - Data Structure - Operations on DataFrames - Handling missing data - Boolean Reductions - Combining DataFrames - pivoting, sorting & aggregation - Descriptive Statistics - Types of Function Application - groupby() & transform() - Re-indexing& altering labels			5	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR7	Pandas Analyzer			2	___/10						
9	<b>DATA VISUALIZATION</b> - matplotlib library - Types of Charts with pyplot			2	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR8	Visualizer			2	___/10						
10	<b>NETWORKING</b> - What is Socket & Port? - What is Client & Server - socket module - Socket Programming			2	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR9	Chat App			3	___/10						
11	<b>WEB SCRAPPING</b> - requests library - beautifulsoup library  <b>WEB AUTOMATION</b> - selenium library - Different browser’s WebDrivers			4	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR10	Scrapper & Bot			4	___/10						
12	<b>JSON PARSING</b> - What is json? - json module - Serialization & Deserialization of data - Read and Write json data with File - Working with live json API data			3	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR11	Fetcher & Parser			5	___/10						
13	<b>Intro to Web Development</b> - Basic HTML - What is Framework - Installing Flask microframework and Run first web app - Routing and Variable Rules - URL Building - HTTP Methods - Templates - Static Files - Sending Form data to Template - File Uploading			12	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR12	Resume Builder			5	___/10						
E2	Viva and Final Exam			2	___/100						

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LEC.	TOPIC										DATE	P/A	DAY	FEEDBACK		STU. SIGN		FACULTY SIGN																										
1	<b>INTRO TO DJANGO FRAMEWORK</b> - What is Web Framework? - MVT Architecture - Setup Virtual Environment - Installing Django - Exploring Directory Structure - Creating First Django Project  <b>SETTING UP DJANGO WEB APP</b> - Creating First Django App - Understanding URL Routing - Handling different Views - Running Web App on Server													<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>		A	B	C	D																									
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PR1	Quick Booster													___/10																														
	<b>TEMPLATES WITH DTL (DJANGO TEMPLATE LANGUAGE)</b> - Setup Template directory's Path - Creating and Rendering Templates using URL Routings * - Passing Context in Multiple Templates - Using DTL to load context in Template - Tags, Variables & Filters - Template Inheritance													<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>		A	B	C	D																									
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PR2	Templatifier													___/10																														
3	<b>FORM HANDLING</b> - Raw HTML Form - Pure Django Form - Form Widgets - Display Form to Multiple Templates													<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>		A	B	C	D																									
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PR3	Form Maker													___/10																														
4	<b>URL ROUTING</b> - Dynamic URL Routing - Creating and Linking Multiple Apps - In App URL Routing & Namespacing - Django URLs Reverse													<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>		A	B	C	D																									
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PR4	Navigator													___/10																														
5	<b>VIEWS AND MIXINS</b> - FBV (Function Based Views) - CBV (Class Based Views) - Convert FBV to CBV - Custom Mixins for CBV													<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>		A	B	C	D																									
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PR5	View Mixer													___/10																														
6	<b>STATIC FILE HANDLING</b> - Setup static and media directory's Path - Adding Bootstrap for Frontend Enhancement - Collect Static Files *													<table border="1"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>D</td></tr> </table>		A	B	C	D																									
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PR6	Asset Bundler													___/10																														
E1	Viva and Examination													___/10																														
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7	<b>WORKING WITH MODELS</b> - Django Database Models - Model Fields - Model Inheritance - Add an App to INSTALLED_APPS - Migrating Models to Database - Update Models and Migrate			2	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR7	<b>Migrator</b>			1	___/10						
8	<b>DAP (DJANGO ADMIN PANEL)</b> - Creating Superuser - Exploring DAP - Manage Superuser - CRUD Operations with DAP - @admin.register() - Customizing DAP			2	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR8	<b>Thrill Explorer</b>			1	___/10						
9	<b>ORM (OBJECT RELATIONAL MAPPER)</b> - Using Django python-shell - Using ORM to deal with Database - CRUD Operation using ORM - Retrieve data using filters			2	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR9	<b>DB Miner</b>			1	___/10						
10	<b>DYNAMIC TEMPLATES</b> - Dynamic Webpages - Retrieve data using QuerySets - Passing context to Template  <b>FORM VALIDATION</b> - Django ModelForm - Form Validation Methods - Setting initial values for Forms			3	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR10	<b>Form Commander</b>			1	___/10						
11	<b>WORKING WITH ANOTHER DATABASE</b> - Integrating MySQL Database - Using XAMPP for Database Interaction			1	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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C	D										
PR11	<b>Teleporter</b>			1	___/10						
12	<b>USER AUTHENTICATION</b> - @login_required decorator for FBV - LoginRequiredMixin for CBV - login(), logout() and authenticate() methods - get_object_or_404() method			2	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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C	D										
PR12	<b>Safe Area</b>			1	___/10						
E2	<b>Viva and Examination</b>			1	___/10						
13	<b>CREATING APIs USING DRF (DJANGO REST FRAMEWORK)</b> - Intro and Installing DRF - Add DRF to INSTALLED_APPS - Adding REST_FRAMEWORK in settings.py - What is Serializer and Deserializer? - Serializer Class and ModelSerializer Class - APIs using Serializers, FBV, CBV, Model Mixins and Generic API Views			5	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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C	D										
PR13	<b>API Digger</b>			2	___/10						
14	<b>TESTING BROWSABLE APIs</b> - Using DRF's URL - Using Postman			1	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR14	Test a Taste			1	___/10						
15	ROUTING AND AUTHENTICATIONS IN DRF - Types of ViewSets - Types of Routers - authentication_classes and permission_classes properties			3	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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C	D										
PR15	Watchman			1	___/10						
16	DOCUMENTING APIs - Using drf-yasg package - Integrating drf-yasg into settings.py - Generating APIs Docs - Test browsable APIs using drf-yasg's url			1	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR16	Scarecrow			1	___/10						
17	PUBLISHING DJANGO WEB APPLICATION - Deploy on GitHub - Deploy on pythonanywhere - Collect Static Files *			3	<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table>	A	B	C	D		
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PR17	Publish a Web App			1	___/10						
E3	Final Exam			1	___/100						

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