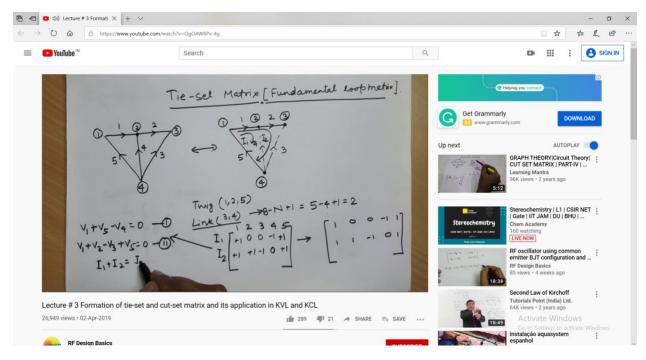
DAILY ASSESSMENT FORMAT

Date:	01/06/2020	Name:	Neha T
Course:	Network Theory	USN:	4AL18EC035
Topic:	1.Network Terminology	Semester	4 th Sem
	2.Basic circuit analysis	& Section:	'A' Section
	3.Different types of matrix & its application		
Github Repository:	Neha-T		

FORENOON SESSION



REPORT

- Network terminology
 - Nodes
 - Branches
 - Loops or meshes
 - Branch currents & mesh currents
 - Node voltages & Junction node voltages
- Basic circuit analysis & network topology

- Overview of analysis
- Serial/parallel reduction
- Voltage/current division
- Ladder circuit
- Network topology is a graphical representation of electric circuits.
- It is useful for analyzing complex electric circuits by converting them into network graphs. Network topology is also called as Graph theory.

Graph of a network

- Network graph is simply called as graph.
- It consists of a set of nodes connected by branches. In graphs, a node is a common point of two or more branches. Sometimes, only a single branch may connect to the node. A branch is a line segment that connects two nodes.

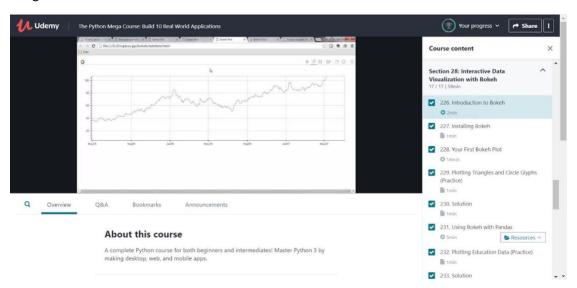
> Incidence matrix

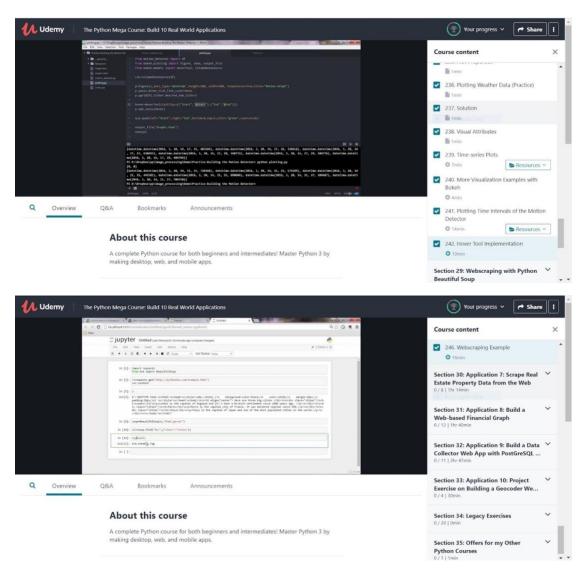
- An Incidence Matrix represents the graph of a given electric circuit or network.
 Hence, it is possible to draw the graph of that same electric circuit or network from the incidence matrix.
- > Formation of tie-set and cut-set matrix
 - Tie-Set: It is a unique set with respect to a given tree at a connected graph containing on chord and all of the free branches contained in the free path formed between two vertices of the chord.
 - Cut-Set: It is that set of elements or branches of a graph that separated two
 parts of a network. If any branch of the cut-set is not removed, the network
 remains connected. The term cut-set is derived from the property designated
 by the way by which the network can be divided in to two parts.
- Tie-set & cut-set matrix applications in KVL & KCL were also discussed.

AFTERNOON SESSION

Date:	01/06/2020	Name:	Neha T
Course:	Network Theory	USN:	4AL18EC035
Topic:	1.Network Terminology	Semester	4 th Sem
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Github			
Repository:	Neha-T		

Image of the session





- ➤ Interactive Data Visualization with Bokeh
 - Introduction to Bokeh
 - Bokeh is a Python interactive visualization library that targets modern web browsers for presentation providing elegant, concise construction of novel graphics with high-performance interactivity over very large or streaming datasets in a quick and easy way.
 - Offering both powerful and flexible features to enable very advanced customizations in one hand and simplicity on the other, Bokeh exposes different interface levels to the users: A *low-level* bokeh.models interface that provides the most flexibility to application developers. An *intermediate-level* bokeh.plottin g interface that is centered around composing visual glyphs. A *high-level* bokeh.charts interface that can be

used to build complex statistical plots as quickly and as simply as possible. This Quickstart focuses on the bokeh.plotting interface

- Installing Bokeh
- First Bokeh Plot
 - Plots are a central concept in Bokeh. They are containers that hold all the various objects (renderers, guides, data, and tools) that comprise the final visualization that is presented to users
- Using Bokeh with Pandas
- Plot properties were also discussed.