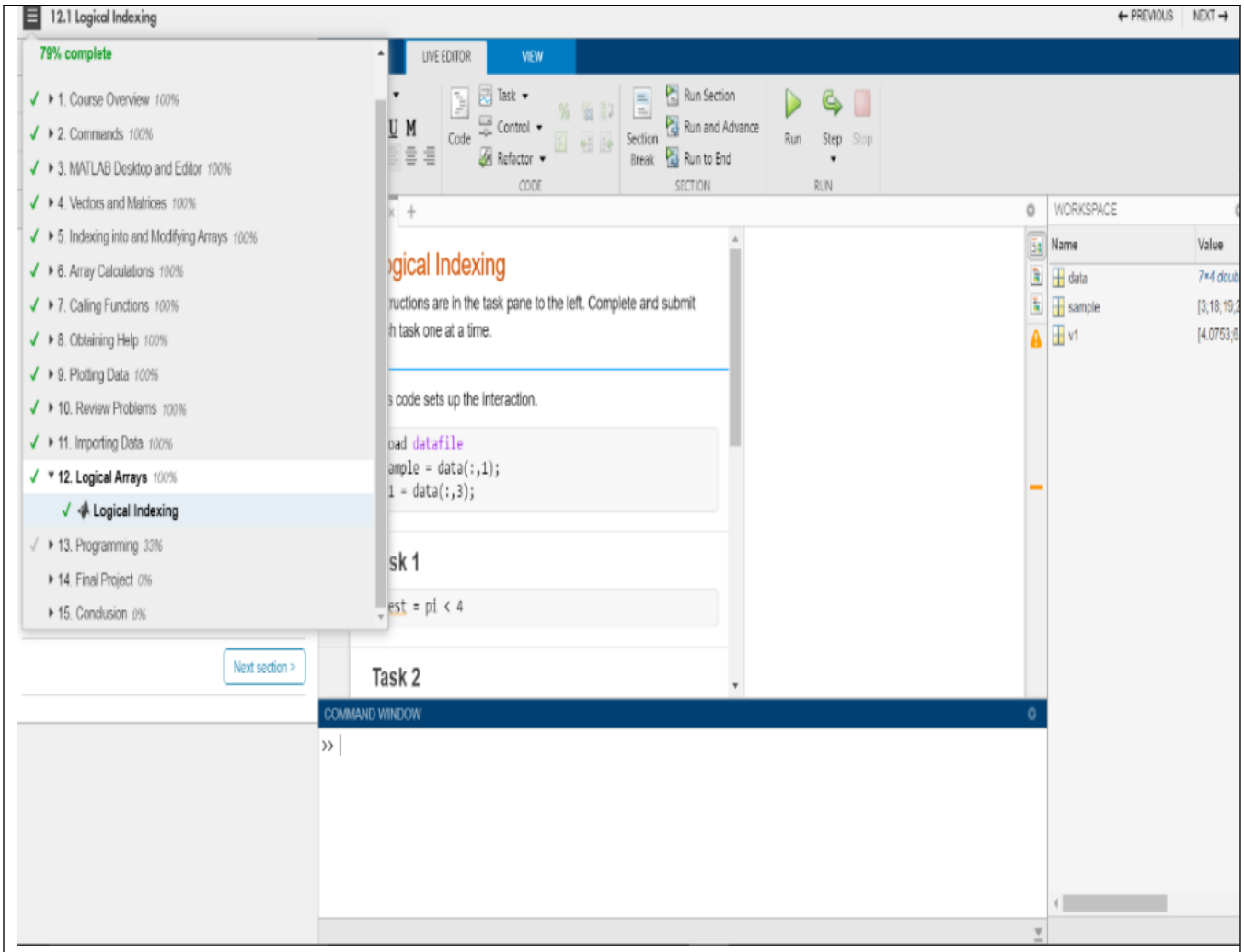
DAILY ASSESSMENT FORMAT

Date:	09-07-2020	Name:	Abhishek
Course:	MATLAB Onramp	USN:	4al17ec001
Topic:	• Review Problems • Importing data • Logical Arrays	Semester & Section:	6 & 'A'
Github Repository:	Abhishek-online-courses		

FORENOON SESSION DETAILS
Image of session



Report –

Importing Data:

- Importing data in MATLAB means loading data from an external file.
- The **importdata** function allows loading various data files of different formats.
- It has the following five forms –

1	**A = importdata(filename)** Loads data into array A from the file denoted by *filename*.
2	**A = importdata('-pastespecial')** Loads data from the system clipboard rather than from a file.
3	**A = importdata(___, delimiterIn)** Interprets *delimiterIn* as the column separator in ASCII file, filename, or the clipboard data. You can use *delimiterIn* with any of the input arguments in the above syntaxes.
4	**A = importdata(___, delimiterIn, headerlinesIn)** Loads data from ASCII file, filename, or the clipboard, reading numeric data starting from line *headerlinesIn+1*.
5	**[A, delimiterOut, headerlinesOut] = importdata(___)** Returns the detected delimiter character for the input ASCII file in *delimiterOut* and the detected number of header lines in *headerlinesOut*, using any of the input arguments in the previous syntaxes.

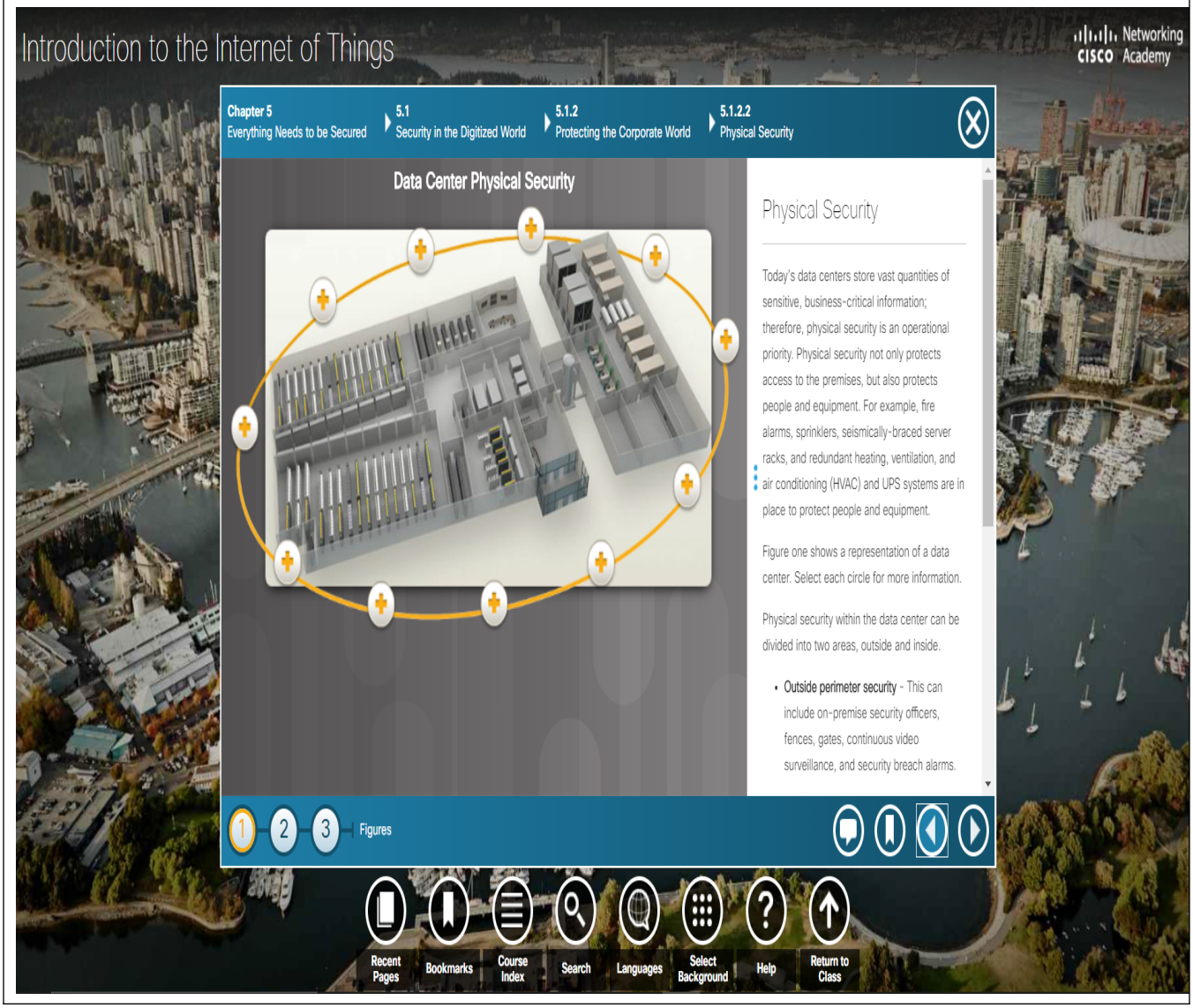
Logical Arrays

- MATLAB offers two types of logical operators and functions −
  - ✓ *Element-wise* − these operators operate on corresponding elements of logical arrays.
  - ✓ *Short-circuit* − these operators operate on scalar, logical expressions.
- Element-wise logical operators operate element-by-element on logical arrays.
- The symbols &, |, and ~ are the logical array operators AND, OR, and NOT.
- Short-circuit logical operators allow short-circuiting on logical operations.
- The symbols && and || are the logical short-circuit operators AND and OR.

Date:	09-07-2020	Name:	Abhishek
Course:	Introduction to IOT	USN:	4al17ec001
Topic:	Chapter 5	Semester & Section:	6 & 'A'

AFTERNOON SESSION DETAILS

Image of session



Report –

Types of Data

- Data generated by computers and digital devices is still groups of 1s and 0s which has not changed.
- What has changed is the quantity, volume, variety, and immediacy of the generated data.
- Today, gathered data is taking on new characteristics.
- The digitized world has opened the floodgates for data gathering.
- IoT sensor-enabled devices are collecting more and more data of a personal nature.

Physical Security

- Today's data centers store vast quantities of sensitive, business-critical information; therefore, physical security is an operational priority.
- Physical security not only protects access to the premises, but also protects people and equipment.
- For example, fire alarms, sprinklers, seismically-braced server racks, and redundant heating, ventilation, and air conditioning (HVAC) and UPS systems are in place to protect people and equipment.
- Physical security within the data center can be divided into two areas, outside and inside.
    - ✓ *Outside perimeter security* - This can include on-premise security officers, fences, gates, continuous video surveillance, and security breach alarms.

- ✓ *Inside perimeter security* - This can include continuous video surveillance, electronic motion detectors, security traps, and biometric access and exit sensors.

Smart Homes

- Smart home technology has become very popular and its popularity is increasing every year as the technology evolves.
- The cool part is it to check on the dog or to verify that your teenagers are doing their homework after school by activating your home security cameras.
- Even virtual assistants such as Apple SIRI, Amazon Echo, or Google Home can be security risks.
- People use these devices to turn on music, adjust room temperatures, order products on -line, and get directions for where they are going.
- It is possible that personal information such as passwords or credit card information could be leaked.
- Fortunately many of the security flaws of the early smart technology sensors have already been discovered.
- Developers are working to correct the flaws and improve security measures to protect their systems from attack.