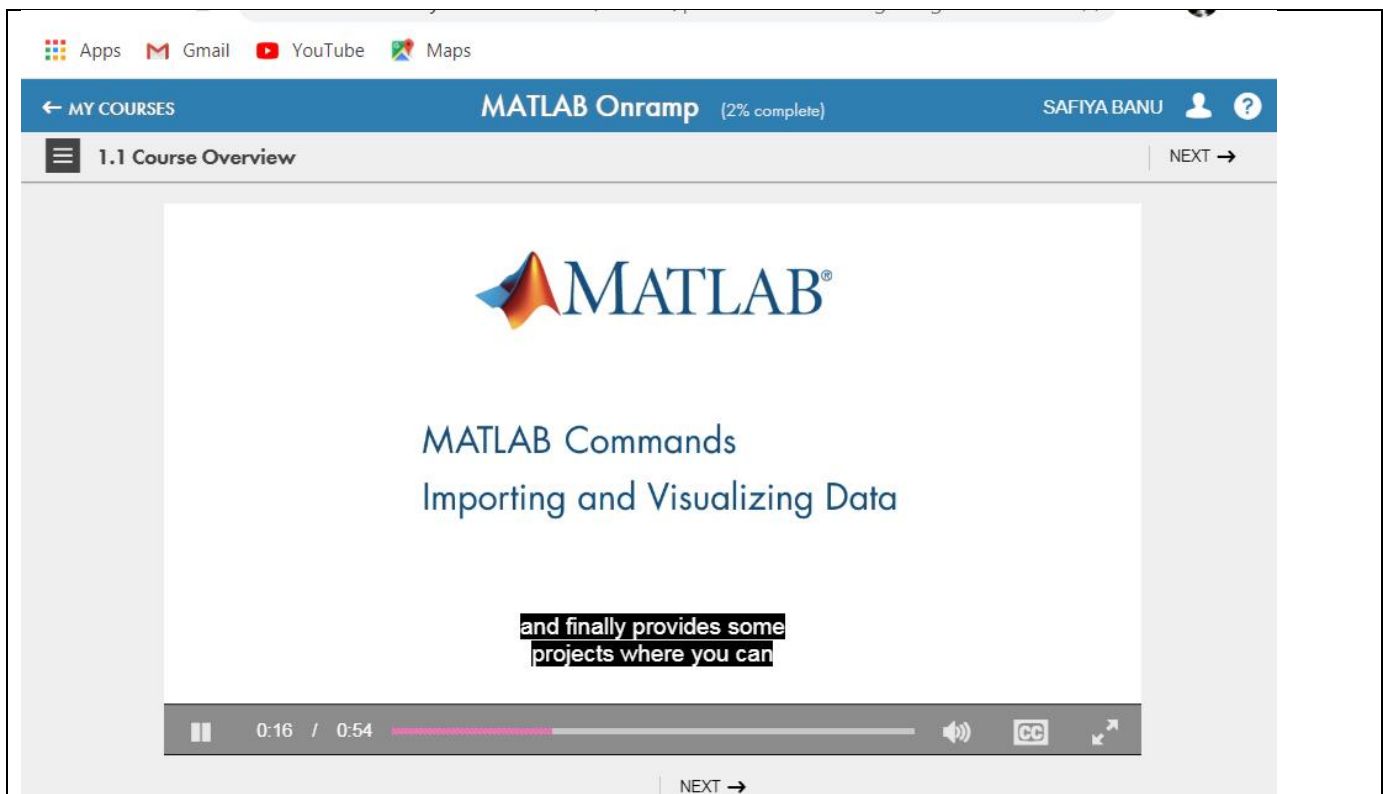


Report

Date:	6 July 2020	Name:	Safiya Banu
Course:	MATLAB Onramp	USN:	4AL16EC061
Topic:	1. Course Overview 2. Commands 3. MATLAB Desktop and Editor 4. Vectors and Matrices	Semester & Section:	8th sem “B”section
Github Repository:	Safiya-Courses		



The screenshot displays the MATLAB Onramp course interface. At the top, there is a navigation bar with "MY COURSES" on the left, "MATLAB Onramp (2% complete)" in the center, and the user name "SAFIYA BANU" on the right. Below this, a sub-header shows "1.1 Course Overview" with a "NEXT" button. The main content area features the MATLAB logo, followed by the text "MATLAB Commands" and "Importing and Visualizing Data". A video player at the bottom shows a paused video at 0:16 / 0:54, with a subtitle that reads "and finally provides some projects where you can".

← MY COURSES

MATLAB Onramp (35% complete)

SAFIYA BANU

5.1 Indexing into Arrays: (1/2) Indexing into Arrays

← PREVIOUS

NEXT →

MATLAB Onramp

35% complete

✓ ▶ 1. Course Overview 100%

✓ ▶ 2. Commands 100%

✓ ▶ 3. MATLAB Desktop and Editor 100%

✓ ▶ 4. Vectors and Matrices 100%

✓ ▼ 5. Indexing into and Modifying Arrays 25%

✓ ▶ Indexing into Arrays (Indexing into Arrays)

▶ Indexing into Arrays (Practice)

▶ Extracting Multiple Elements

▶ Changing Values in Arrays

▶ 6. Array Calculations 0%


▶ 7. Calling Functions 0%

▶ 8. Obtaining Help 0%

▶ 9. Plotting Data 0%

▶ 10. Review Problems 0%

▶ 11. Importing Data 0%



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NEXT →

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MATLAB Onramp (2% complete)

SAFIYA BANU

2.1 Entering Commands

← PREVIOUS

NEXT →

Task 1

You can execute commands by entering them in the command window after the MATLAB prompt (`>>`) and pressing the **Enter** key.

TASK

Multiply the numbers 3 and 5 together with the command `3*5`.

[Hint](#) | [See Solution](#)

Task 2

Task 3

Task 4

Task 5

HOME

Task 1 ✓

`>> 3*5`

ans =

15

Correct!

Space


Continue |

Esc

Try an alternative solu

WORKSPACE

Name

 ans

MY COURSES
MATLAB Onramp (5% complete)
SAFIYA BANU

2.2 Naming Variables
PREVIOUS
NEXT

Task 1

You can name your MATLAB variables anything you'd like as long as they **start** with a letter and contain only letters, numbers, and underscores (_).

MATLAB variables are also case sensitive.

TASK
Assign the value -2 to the variable `A`.

[Hint](#) | [See Solution](#)

HOME

```
>> a = 8
```


```
a =
```

```
8
```

Task 1

```
>>
```

WORKSPACE

Name
 a

Task 2

Further Practice

NAMING VARIABLES

You can name your MATLAB variables anything you'd like as long as they **start** with a letter and contain only letters, numbers, and underscores (_).

MATLAB variables are also case sensitive.

What's an Array?

All MATLAB variables are arrays. This means that each variable can contain multiple elements. You can use arrays to store related data in one variable.

Because you'll use arrays every time you program, it's important to get to know them and the terminology used to describe them.

When you separate numbers by spaces (or commas) as shown in the previous task, MATLAB combines the numbers into a row vector, which is an array with one row and multiple columns (1-by-n). When you separate numbers by semicolons, MATLAB creates a column vector (n-by-1).

```
x = [1;3]
x =
    1
    3
```

If you know the number of elements you want in a vector (instead of the spacing between each element), you could instead use the linspace function:

```
linspace(first,last,number_of_elements)
```

Note the use of commas (,) to separate inputs to the linspace function.

```
x = linspace(0,1,5)
x =
    0    0.250    0.500    0.750    1.00
```

Array Creation Functions

MATLAB contains many functions that help you to create commonly used matrices, such as matrices of random numbers.

```
x = rand(2)
x =
    0.8147    0.1270
    0.9058    0.9134
```

Note that the 2 in the command rand(2) specifies that the output will be a 2-by-2 matrix of random numbers.

