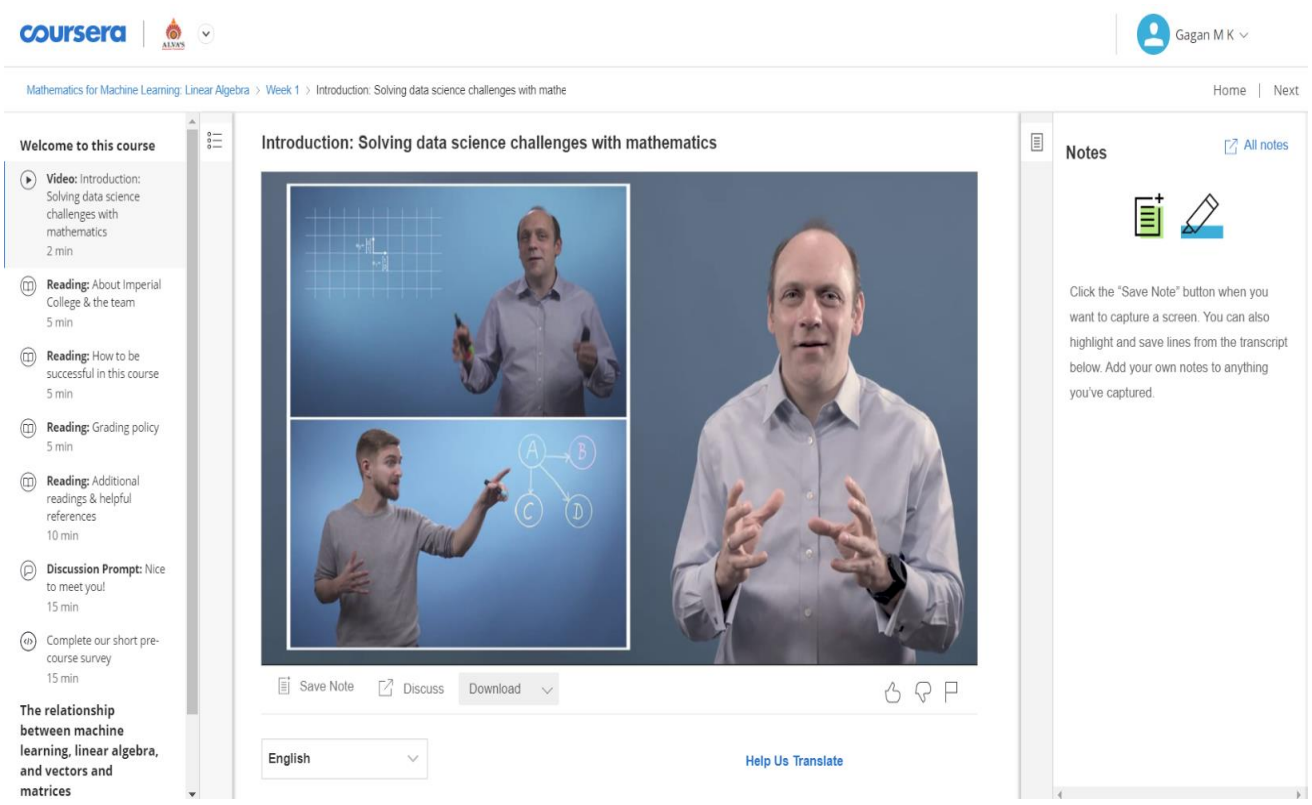
DAILY ASSESSMENT REPORT

Date:	**13 July 2020**	**Name:**	**Gagan M K**
Course:	**Mathematics for Machine Learning: Linear Algebra**	**USN:**	**4AL17EC032**
Topic:	• **Welcome to this course** • **The relationship between machine learning, linear algebra, and vectors and matrices** • **Vectors**	**Semester & Section:**	**6th sem & 'A' sec**
GitHub Repository:	**Alvas-education-foundation/Gagan-Git**		

FORENOON SESSION DETAILS
Image of session

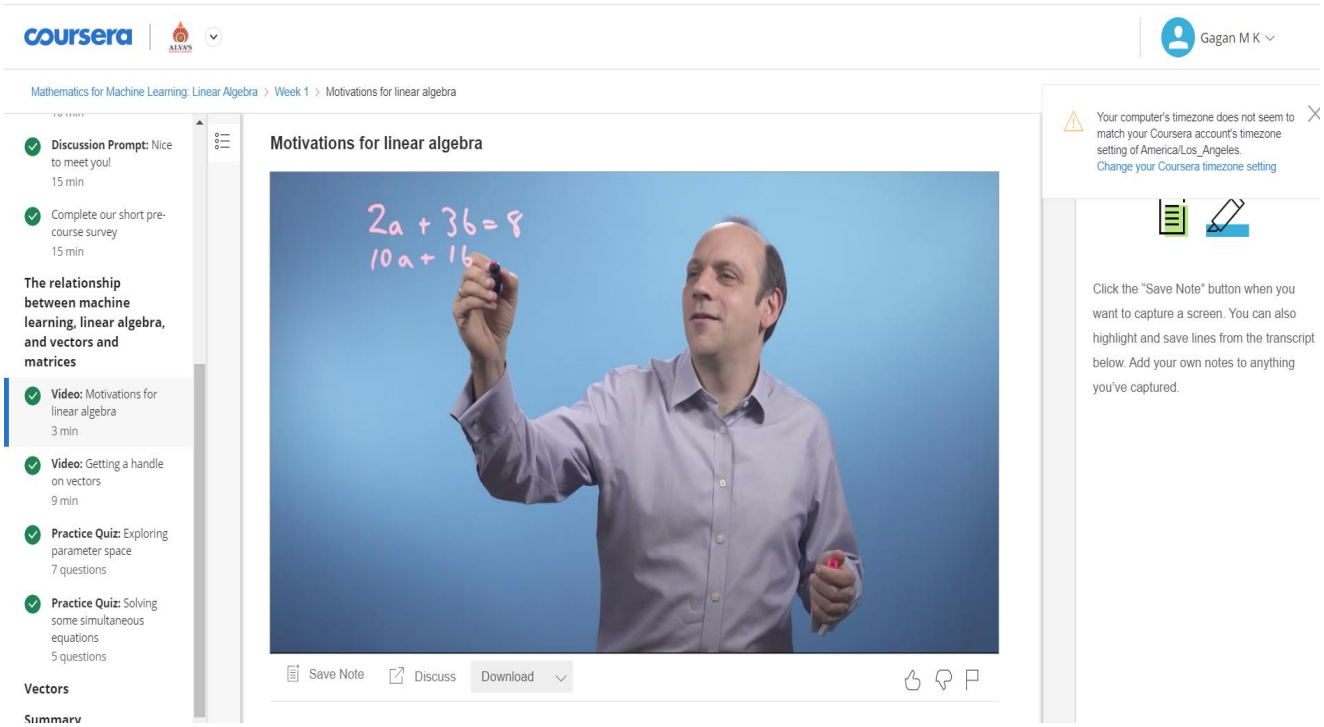


Report – Report can be typed or hand written for up to two pages.

Linear Algebra:

- **Welcome to the Mathematics for Machine Learning specialization. Before we get stuck in, let's set the scene. Machine learning is a set of powerful mathematical tools that enable us, to represent, interpret, and control the complex world around us.**
- **However, even just the word mathematics makes some people feel uneasy and unwelcome to explore the topic.**
- **The purpose of this specialization is to take you on a tour through the basic maths underlying these methods, focusing in particular on building your intuition rather than worrying too much about the details. Thanks to the amazing machine learning community, it's actually possible to apply many powerful machine learning methods without understanding very much about the underpinning mathematics, by using open source libraries.**
- **This is great, but problems can arise and without some sense of the language and meaning of the relevant maths, you can struggle to work out what's gone wrong or how to fix it.**
- **The ideal outcome of this specialization is that it will give you the confidence and motivation to immediately dive into one of the hundreds of boolean applied machine learning courses already available online, and not be intimidated by the matrix notation or the calculus.**
- **We want to open up machine learning to as many people as possible, and not just leave all the fun to computer scientists.**
- **This first course offers the introduction to linear algebra which is essentially a set of notational conventions and handy operations, that allow you to manipulate large systems of equations conveniently.**
- **Over the next five modules, we'll be focusing on building your intuition about vectors and translations through the use of quizzes and interactive widgets as well as occasionally asking you to fill in the gaps in some Python coding examples.**
- **In the final module, Dr. Sam Cooper will bring it all together by showing you how linear algebra is at the heart of Google's famous page rank algorithm, which is used for deciding the order of web pages in search results.**
- **Hopefully, if you find this course useful, you'll stick around for a follow-on course by Sam and I who will introduce you to multivariate calculus.**
- **Then, in our other course Dr. Mark Dyes and I will introduce principal component analysis. So welcome. We really hope that the course will be productive and useful for you but also quite a lot of fun and I look forward to hearing from you in the forums.**
- **The first problem I might think of is one of price discovery. Say I go shopping on two occasions, and I buy apples and bananas, and the first time I buy two apples and three bananas and they cost eight Euros.**
- **The second time I buy say, ten apples and one banana, and the cost is 13 Euros. And the As and the Bs here, are the price of a single apple and a single banana. And what I'm going to have to do is solve these what we call simultaneous equations in order to discover the price of individual apples and bananas.**
- **Now in the general case of lots of different types of items and lots of shopping trips, then finding out the prices might be quite hard.**

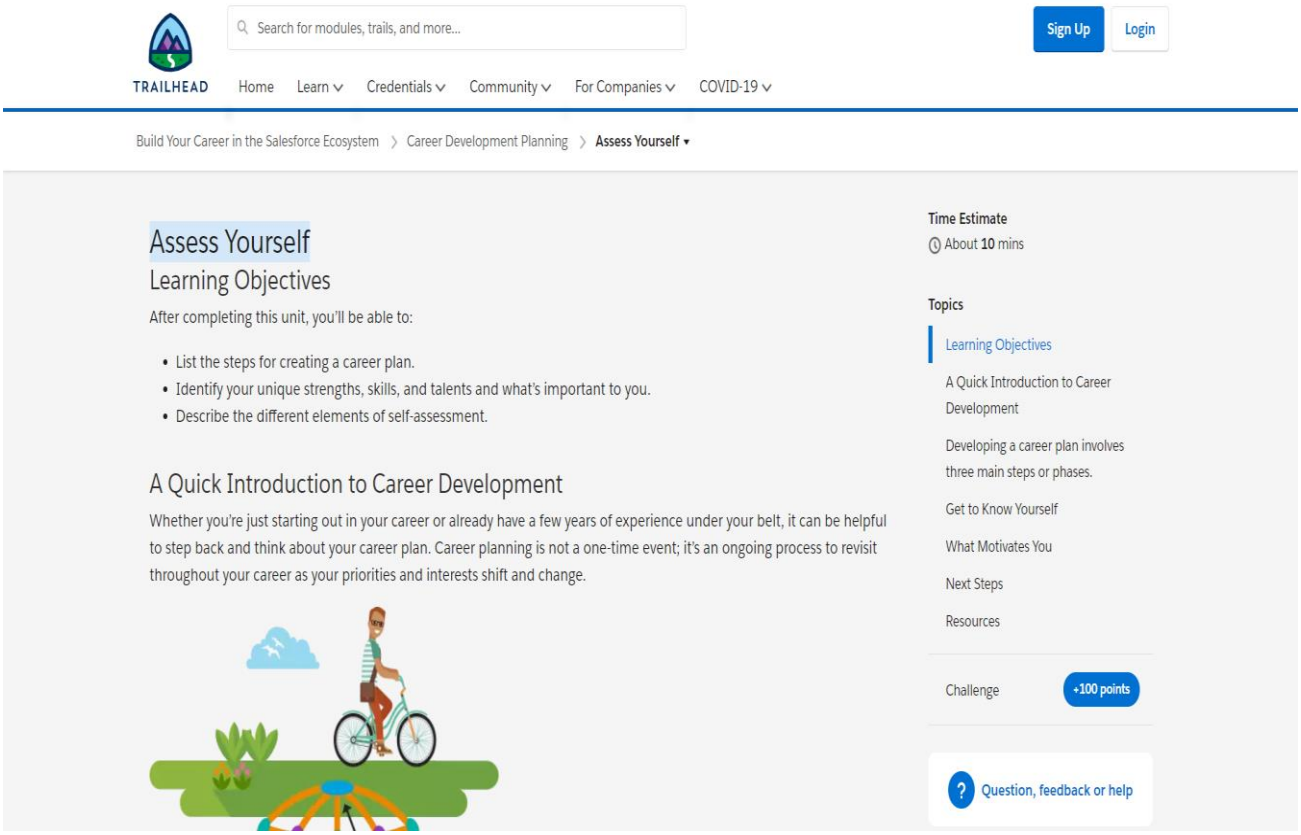
- **It might be quite difficult to solve all these equations by hand. So, we might want a computer algorithm to do it for us, in the general case.**
- **Now, this is an example of a Linear Algebra problem. I have some constant linear coefficients here, these numbers 2, 10, 3, 1, that relate the input variables A and B, to the output 8 and 13, that is if I think about a vector [a,b], that describes the prices of apples and bananas.**
- **Then this gets translated into a cost, to find out how many I might want to buy, and the cost happens to be 8 on the first trip, and 13 Euros on the second trip.**
- **And I can write this down as a matrix problem where the 2, 3 is my first trip, and the 10, 1 is my second trip, and then these are then matrices, that's a matrix then, and these are vectors, and what we're going to do over the course of modules one to three, is build up, Looking at these different types of mathematical objects, and understanding what they are and how to work with them, these vectors and these matrices.**
- **And then, we'll come back and figure out how to solve this problem in the general case. Another type of problem we might be interested in is fitting an equation to some data.**
- **In fact, with neural networks and machine learning, we want the computer in effect not only to fit the equation, but to figure out what equation to use. That's a highly inexact description really of what's going on, but it gives the right sort of flavor.**
- **In this video, we've set up two problems in this first module on Linear Algebra. First, the problem of apples and bananas, of solving simultaneous equations.**
- **And secondly, the optimization problem of fitting some data with an equation with some fitting parameters, and these problems we'll go on to look at and motivates our work right through the course on Linear Algebra, and it's partner of multivariate calculus.**



Date:	13 July 2020	Name:	Gagan M K
Course:	Salesforce	USN:	4AL17EC032
Topic:	• Assess Yourself	Semester & Section:	6th sem & 'A' sec

AFTERNOON SESSION DETAILS

Image of session:



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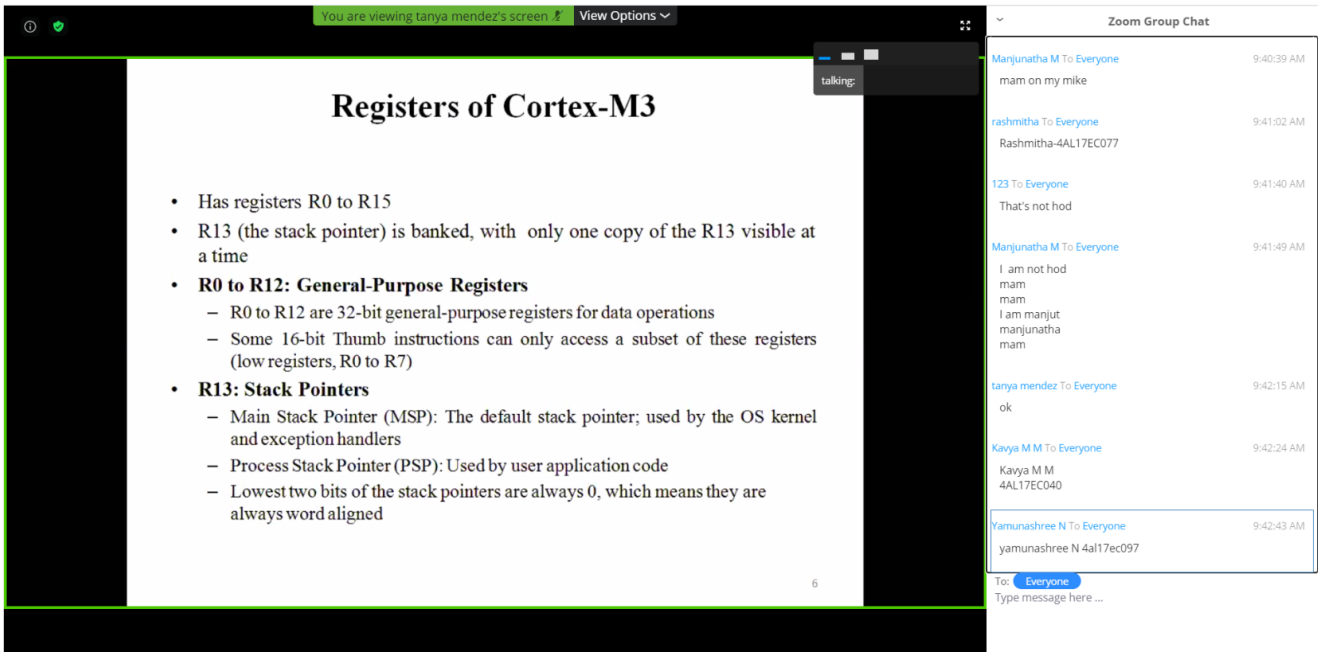
- **Whether you're just starting out in your career or already have a few years of experience under your belt, it can be helpful to step back and think about your career plan. Career planning is not a one-time event; it's an ongoing process to revisit throughout your career as your priorities and interests shift and change.**
- **There are various directions you can explore: up, down, and sideways. When you're clear about your career goals, you can choose the options that are the best fit. Then it's time to get ready for new experiences or new roles.**
- **The career development process can be helpful to revisit when you're thinking about switching careers or applying your existing experience to work in a new field. Or maybe you're returning to work after a period out of the workforce.**
- **You can use these three simple steps to plan your career.**
- **Discover. Get to know yourself, including your motivations, experiences you want, skills to build, and career goals to achieve. Research and explore opportunities and career paths that interest you and that may not have considered before.**
- **Plan. Identify a goal and any skills you need to build or to reach that goal. Lay out a plan of how you will achieve that goal.**
- **Act.Take action on your plan. Identify how to get connected to employers and mentors that can help you. Prepare your resume and social media presence to land that dream job.**
- **The first step in managing your career is to get a clear picture of who you are and what you want.**
- **Knowing what motivates you and what matters in your life**
- **Identifying your strengths and opportunities to improve**
- **Finding out what you're most interested in**
- **What we want can change over time—our priorities change, we can discover new interests or skills that we want to develop and learn. This is an opportunity to check in and see where you are today.**
- **There are many free self-assessment tools out there to help you identify your own values, skills, and interests. We've provided links to a few of them in the resources section. You may want to start by exploring some of these tools.**
- **We've also provided a Career Exploration Resources pack with worksheets to guide you through each step of career development process. We recommend downloading it and finding a quiet place where you can work through it.**
- **Think about that day you left work or school thinking "Wow, that was a great day!"**
- **Do you remember what was happening? Whatever it was, you were probably doing something that you found motivating and energizing.**
- **Once you've completed your self-assessment, review your results and identify any themes that emerge. It can be helpful to talk over your results with a friend or family member.**

“Attended Revision Class On 13 July 2020 on AMES by Tanya Ma’am”



“Attended Webinar on DRONE INDUSTRY INSIGHTS conducted by AIET”