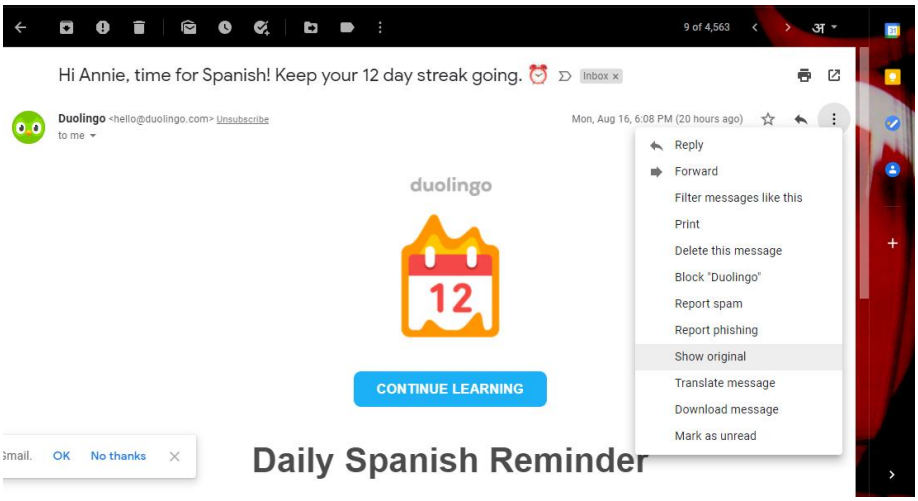
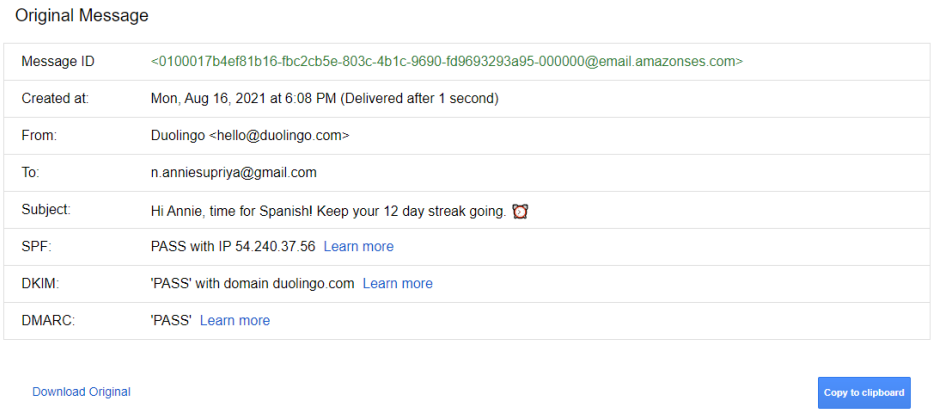
OUTSTANDING – 2

Using google apps toolbox to review email headers

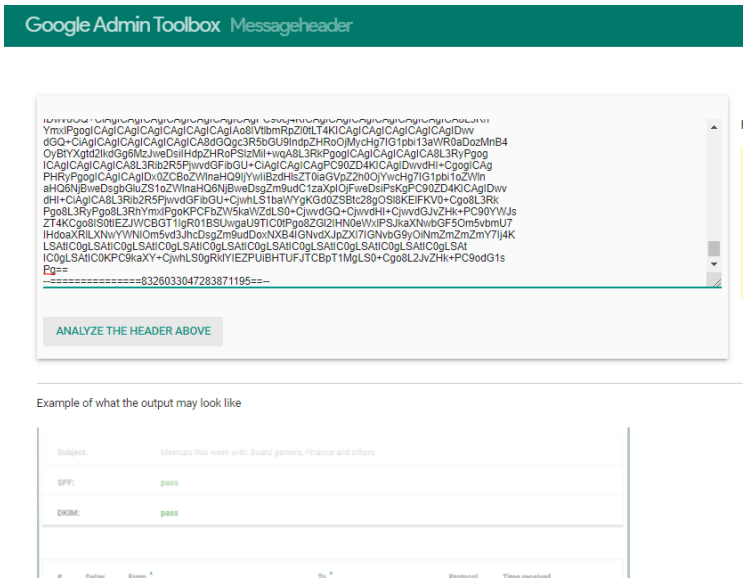
Step-1: Open the e-mail which you want to investigate and check for its header.



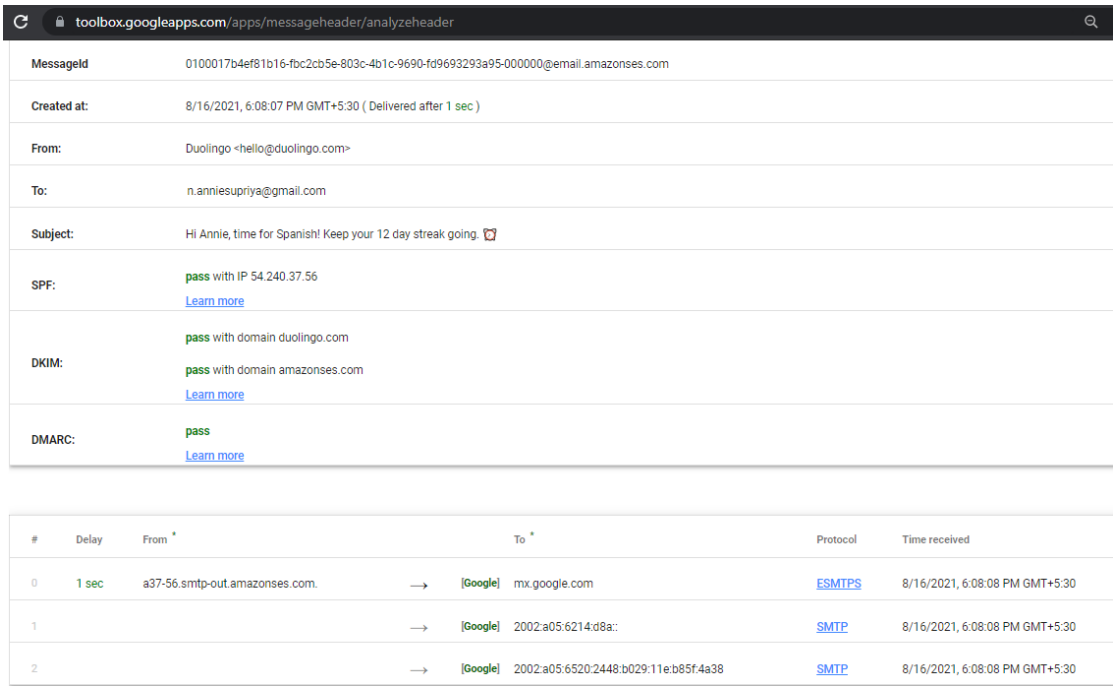
Step-2: Coping the original form of the email to further analyze.



Step-3: Analyzing the message header by using Google Admin Toolbox.



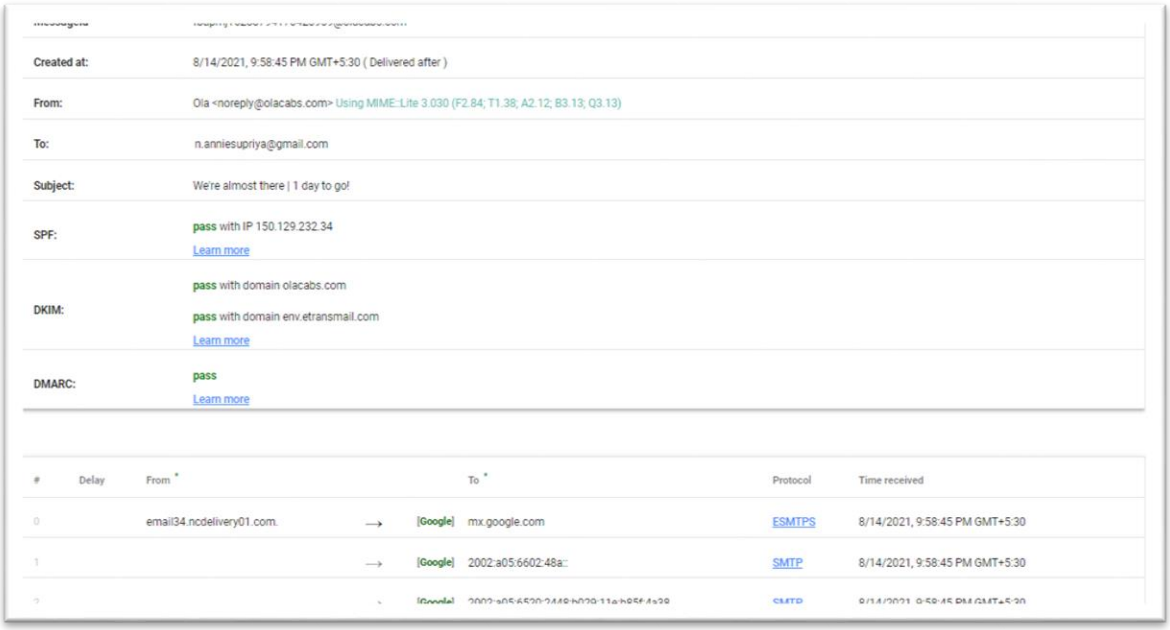
Step-4: Now we have vital information for diagnosing the email problems. You can trace the emails direct path and sources that can help troubleshoot breakpoints in the emails path.



We have basic information of the email including things such as from, to, date, subject, and MessageId. Mail transfer agents (MTAs) are used to manage this process; each time an email is sent or forwarded by an MTA, it's stamped with date, time, and recipient information.

Similarly, we are checking the email headers for other emails received.

Email-2: An email from Ola gaining basic information. Information of the sender's IP address, Domain name of the sender.



Email-3: Analyzing an email header from LinkedIn.

MessageId	885076532.3651772.1628496160380.JavaMail.app@lva1-app72754.prod.linkedin.com
Created at:	8/9/2021, 1:32:40 PM GMT+5:30 (Delivered after 3 sec)
From:	Adithvaas Ambalathil <invitations@linkedin.com>
To:	Annie Supriya <n.anniesupriya@gmail.com>
Subject:	Annie, please add me to your LinkedIn network
SPF:	**pass** with IP 2620:119:50c0:207::158 Learn more
DKIM:	**pass** with domain linkedin.com **pass** with domain mailb.linkedin.com Learn more
DMARC:	**pass** Learn more

#	Delay	From *			To *	Protocol	Time received
0	2 sec	mailb-hf.linkedin.com	→	[Google]	mx.google.com	ESMTPS	8/9/2021, 1:32:42 PM GMT+5:30
1			→	[Google]	2002:a02:a117::	SMTP	8/9/2021, 1:32:42 PM GMT+5:30
2	1 sec		→	[Google]	2002:a05:6520:2448:b029:11e:b85f:4a38	SMTP	8/9/2021, 1:32:43 PM GMT+5:30

As per the analysis, there has been a 3 second delay in the delivery of the email. The protocols used are ESMTPS and SMTP. Domain name and the Ip address of the sender is provided.

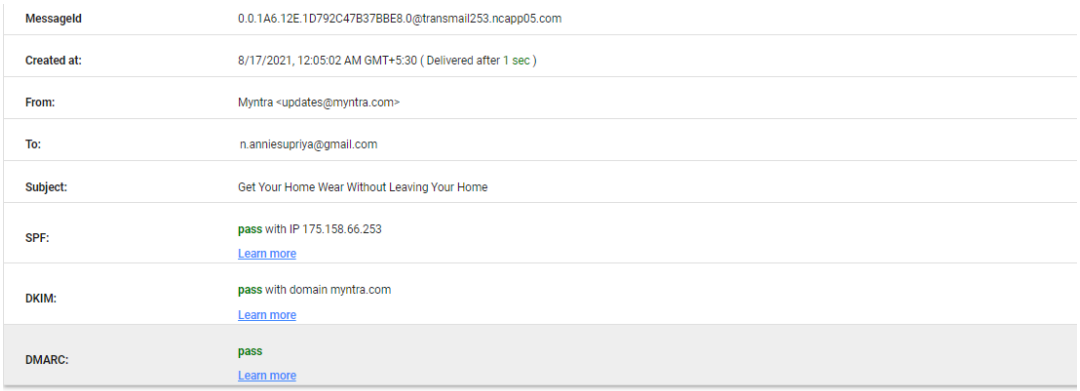
Email-4: Gaining information about the email header from Coursera.

MessageId	07d0c1a9-26f3-41f5-8e3b-c19aaea063f4@atl1s11mta345.xt.local
Created at:	8/16/2021, 11:13:39 PM GMT+5:30 (Delivered after 4 sec)
From:	Coursera <Coursera@email.coursera.org>
To:	<n.anniesupriya@gmail.com>
Subject:	Trending this week at Coursera
SPF:	**pass** with IP 13.111.170.21 Learn more
DKIM:	**pass** with domain email.coursera.org Learn more
DMARC:	**pass** Learn more

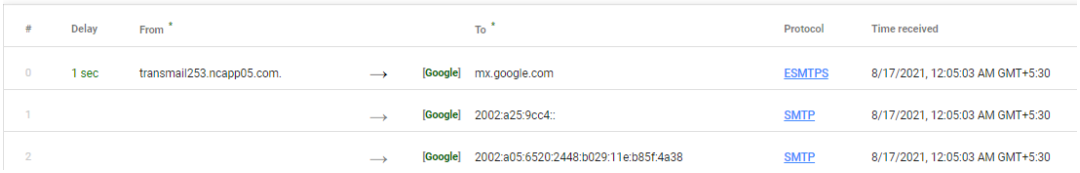
#	Delay	From *			To *	Protocol	Time received
0	3 sec	mta6.email.coursera.org.	→	[Google]	mx.google.com	ESMTPS	8/16/2021, 11:13:42 PM GMT+5:30
1			→	[Google]	2002:a05:620a:138a::	SMTP	8/16/2021, 11:13:42 PM GMT+5:30
2	1 sec		→	[Google]	2002:a05:6520:2448:b029:11e:b85f:4a38	SMTP	8/16/2021, 11:13:43 PM GMT+5:30

Basic information of the sender is gathered by this analysis. Here there is a 4 second delay between when the email is sent and when it is released by the client.

Email-5: Email header analysis on email from Myntra.



MessageId	0.0.1A6.12E.1D792C47B37BBE8.0@transmail253.ncapp05.com
Created at:	8/17/2021, 12:05:02 AM GMT+5:30 (Delivered after 1 sec)
From:	Myntra <updates@myntra.com>
To:	n.anniesupriya@gmail.com
Subject:	Get Your Home Wear Without Leaving Your Home
SPF:	pass with IP 175.158.66.253 Learn more
DKIM:	pass with domain myntra.com Learn more
DMARC:	pass Learn more



#	Delay	From *			To *	Protocol	Time received
0	1 sec	transmail253.ncapp05.com.	→	[Google]	mx.google.com	ESMTPS	8/17/2021, 12:05:03 AM GMT+5:30
1			→	[Google]	2002:a25:9cc4::	SMTP	8/17/2021, 12:05:03 AM GMT+5:30
2			→	[Google]	2002:a05:6520:2448:b029:11e:b85f:4a38	SMTP	8/17/2021, 12:05:03 AM GMT+5:30

There is a 1 second delay here when the message is received. The protocols used here are EMTPS and SMTP.