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| **Topic** | Apache Kafka |
| **Document Name** | KAFKA-EX-02 |
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| **Document Difficulty Level** | | | |
| **Beginner** | **Junior** | **Senior** | **Expert** |
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# Document History

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| --- | --- | --- | --- |
| Date | Author | Ver | Comments |
| 05.03.2025 | Mennan Tekbir | 1.0 | Initial Draft |
| 05.03.2025 | Mehmet Erdem Önal | 1.1 | Revisions |

# Apache Kafka

## Exercise KAFKA-EX-02:

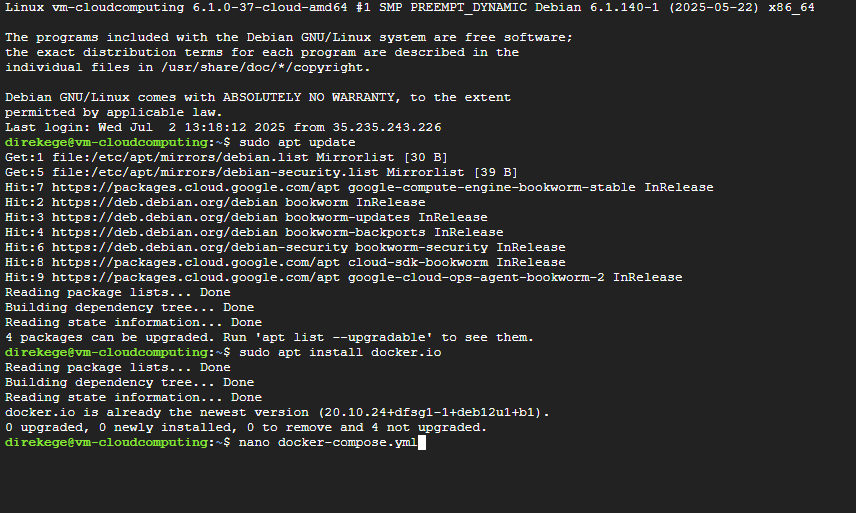
**Definiton:** Pull & run Kafka container from Docker Hub in your GCP or AWS cloud machine. (You can use confluent oﬀcial docker- [repo](https://github.com/confluentinc/cp-all-in-one/tree/7.5.0-post/cp-all-in-one) ). For being more practical, you can run in your local machine first, and then, you can switch to cloud machine.

**Note:** If you did not get a cloud machine previously, you may simply run it on your local machine.

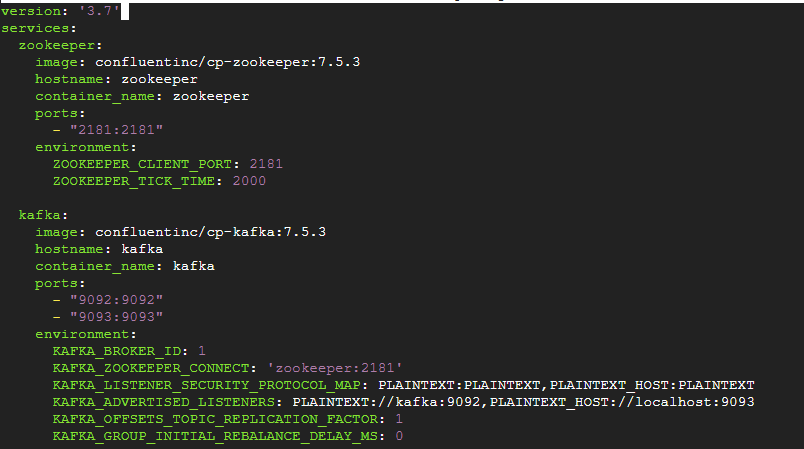
**Hint:** [Run Apache Kafka using Docker](https://www.youtube.com/watch?v=8ZTTcAWMIAE)

Please provide screenshots to show your work.

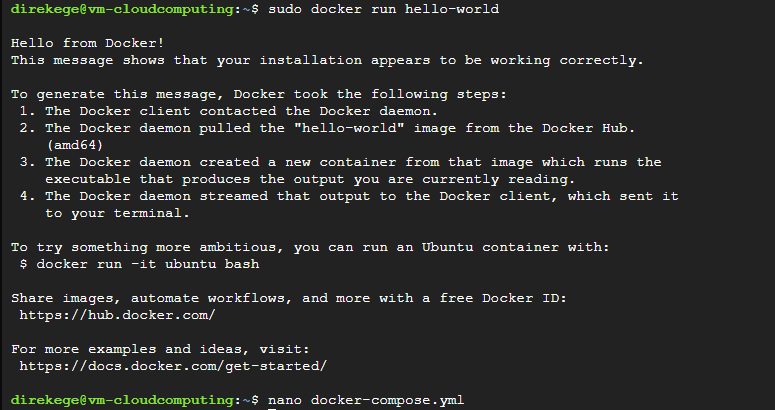
1-First in SSH terminal we update our terminal and tools then install Docker in our VM and create .yml file for install Kafka and ZooKeeper.

[](https://private-user-images.githubusercontent.com/209494583/461660714-97469574-ac82-475f-8f66-6e18a8794a38.png?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3NTE0ODA5NDAsIm5iZiI6MTc1MTQ4MDY0MCwicGF0aCI6Ii8yMDk0OTQ1ODMvNDYxNjYwNzE0LTk3NDY5NTc0LWFjODItNDc1Zi04ZjY2LTZlMThhODc5NGEzOC5wbmc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjUwNzAyJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI1MDcwMlQxODI0MDBaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT00M2IwYWE0M2IzZjc5YjQ3NmJiMzEwMzhlNmMyODQ1ODA4MWVjMDUxODU2YmZlNDYxNjE0YWUzMzExNTk4ZDgxJlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCJ9.bzKtVsTdbFbhC-W9vehpULnnvwdKKX0Sr_pI0BfbY-Q)

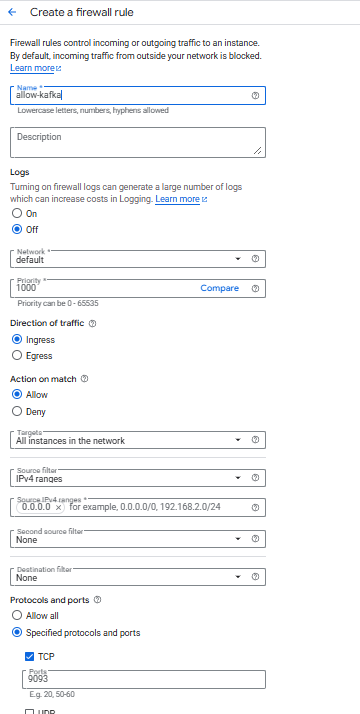
2- Then in the opened file-write terminal screen we bring up commands for installing Kafka and ZooKeeper with configuration.

[](https://private-user-images.githubusercontent.com/209494583/461662830-a8e4eceb-c0da-467c-b290-396ffd601b26.png?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3NTE0ODA5NDAsIm5iZiI6MTc1MTQ4MDY0MCwicGF0aCI6Ii8yMDk0OTQ1ODMvNDYxNjYyODMwLWE4ZTRlY2ViLWMwZGEtNDY3Yy1iMjkwLTM5NmZmZDYwMWIyNi5wbmc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjUwNzAyJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI1MDcwMlQxODI0MDBaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT1jNWQwOGJhMzNhMmVlNTA5NmIwYjU3OTAwZDAzMGY3Mzg2NzllZjA4N2U3MjQxZTZkZTM1ZmI1NTNmNzVjODcwJlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCJ9.QQfAnh7ERds-klHZa6tcu1Kc_s2DeNGuZLnxfwKUcj8)

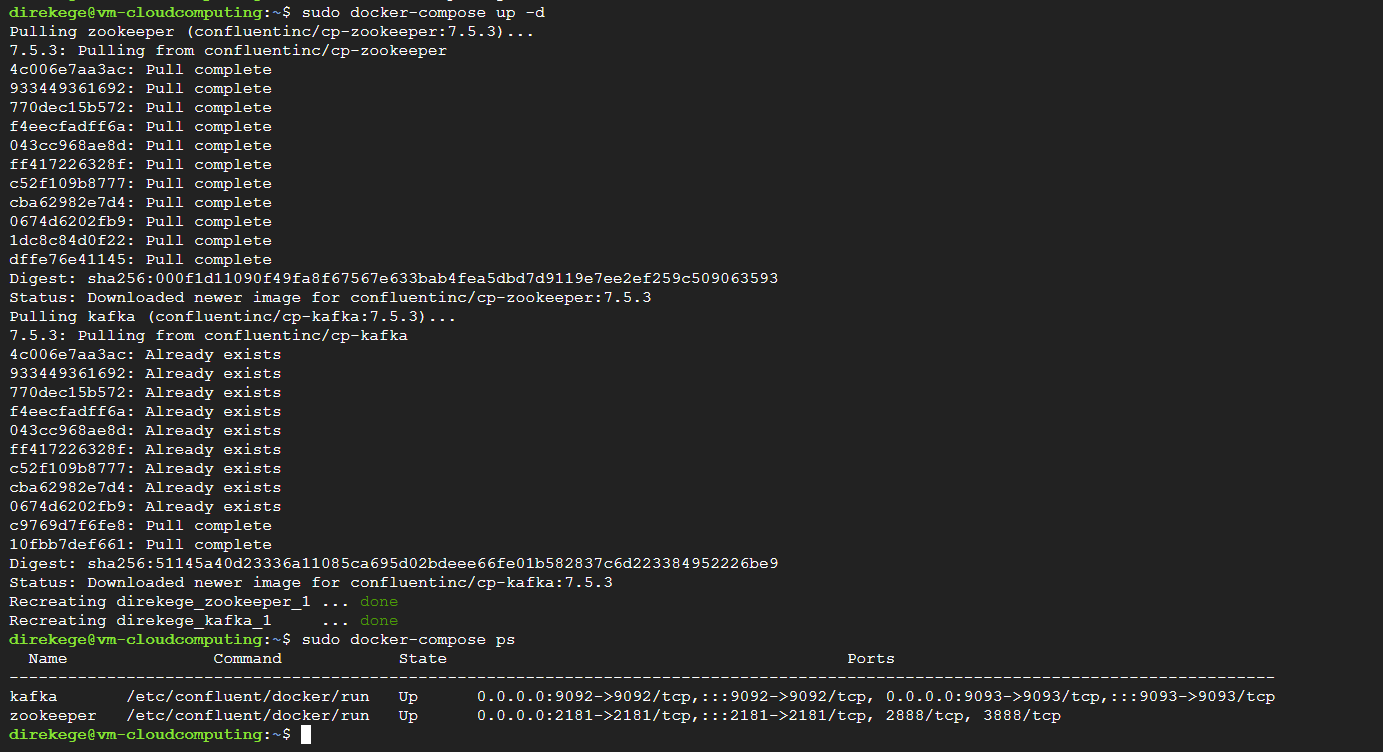
3- Checking Docker

[](https://private-user-images.githubusercontent.com/209494583/461663385-a4d3f567-b762-49d8-9ee8-5bf69995aaf1.png?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3NTE0ODA5NDAsIm5iZiI6MTc1MTQ4MDY0MCwicGF0aCI6Ii8yMDk0OTQ1ODMvNDYxNjYzMzg1LWE0ZDNmNTY3LWI3NjItNDlkOC05ZWU4LTViZjY5OTk1YWFmMS5wbmc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjUwNzAyJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI1MDcwMlQxODI0MDBaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT1kY2Q3NzNlZmU2OTg3MmUxMjg5ZTZkNjE1Zjk1ZjI3MTc4NjMxMTExNjIxY2ZiNTRlZGE0YjI1ZTgwNTcwNjE4JlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCJ9.JSkZw7WZ1AZR39AVhFVc2CRj17KIHmCIpV_kzJZRtDo)

4- For external access to Kafka we have to create a firewall rule for our VM.

[](https://private-user-images.githubusercontent.com/209494583/461664087-c6ab3ccd-89fb-44aa-9063-4271bd4d35a4.png?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3NTE0ODA5NDAsIm5iZiI6MTc1MTQ4MDY0MCwicGF0aCI6Ii8yMDk0OTQ1ODMvNDYxNjY0MDg3LWM2YWIzY2NkLTg5ZmItNDRhYS05MDYzLTQyNzFiZDRkMzVhNC5wbmc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjUwNzAyJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI1MDcwMlQxODI0MDBaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT1lNmY4NGJkODMwYzY1M2FhNzE2NjVkMjA0YWY3NjljY2ViYTc3ZDFiNDM5Nzk2NzIwZTNhY2JhZDdlYmI0YzBiJlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCJ9.SomBaaJ54R38BHDynhjg_rnua2cGnbX2L_h2-BHn4JY)

5- Lastly to launch our services; we use "sudo docker-compose up -d" command and finisihing our task with checking proccess status.

[](https://private-user-images.githubusercontent.com/209494583/461665472-f55cf018-d4c4-4f3d-94bf-312e88d7ca55.png?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3NTE0ODA5NDAsIm5iZiI6MTc1MTQ4MDY0MCwicGF0aCI6Ii8yMDk0OTQ1ODMvNDYxNjY1NDcyLWY1NWNmMDE4LWQ0YzQtNGYzZC05NGJmLTMxMmU4OGQ3Y2E1NS5wbmc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjUwNzAyJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI1MDcwMlQxODI0MDBaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT1hZDI0NjQxYTY3MGZmMmY4MGJlMTJkZTg4Mjc2NzIwNzNkMzE4OTE5Mzc4ZDk0NDZlMmYxMGZmZjczYjZlZTJiJlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCJ9.XkhIRgQy_clKNQ7CapLDHf2_fvrZR6Z_PF0mNms_QYU)

## KAFKA-EX-02 Solution:

**Your Answer:**

You may provide screenshots here to show your work…