Data Engineering ZoomCamp

Module 1 Homework
Question 1
 –rm Automatically remove the container when it exits

Question 2.
Package wheel 0.42.0

Question three: 15612
```
  SELECT COUNT(*) FROM (SELECT
      CAST(lpep_dropoff_datetime AS DATE),
              CAST(lpep_pickup_datetime AS DATE)

      FROM green_taxi_trips)AS t1
WHERE lpep_dropoff_datetime = '2019-09-18' AND lpep_pickup_datetime = '2019-09-18';
```

Question four: 2019-09-26
```
WITH t1 AS (SELECT DATE(lpep_pickup_datetime),
                  lpep_pickup_datetime,
                  lpep_pickup_datetime::TIMESTAMP::TIME,
                  trip_distance
  FROM green_taxi_trips)

SELECT date, MAX(trip_distance) distance FROM t1
GROUP BY date
ORDER BY 2 desc;
```

Question Five: Brooklyn" "Manhattan" "Queens"
```
WITH t1 AS(SELECT DATE(tp.lpep_pickup_datetime) as new_date,
                  zo."Borough",
                  tp.total_amount

              FROM green_taxi_trips tp
        JOIN zones zo
          ON  tp."DOLocationID" = zo."LocationID")
SELECT t1.new_date, t1."Borough", SUM(t1.total_amount) total_amt FROM t1
              GROUP BY 1,2
        HAVING t1.new_date = '2019-09-18' AND t1."Borough" != 'Unknown'
              ORDER BY 3 desc;
```

Question 7:
$ terraform apply

Terraform used the selected providers to generate the following execution plan. Resource
actions are indicated

with the following symbols:
  + create

Terraform will perform the following actions:

  # google_bigquery_dataset.demo_dataset will be created
  + resource "google_bigquery_dataset" "demo_dataset" {
      + creation_time   = (known after apply)
      + dataset_id   = "demo_dataset"
      + default_collation   = (known after apply)
      + delete_contents_on_destroy = false
      + effective_labels   = (known after apply)
      + etag   = (known after apply)
      + id   = (known after apply)
      + is_case_insensitive   = (known after apply)
      + last_modified_time   = (known after apply)
      + location   = "EU"
      + max_time_travel_hours   = (known after apply)
      + project   = "sunny-web-411214"
      + self_link   = (known after apply)
      + storage_billing_model   = (known after apply)
      + terraform_labels   = (known after apply)
    }

  # google_storage_bucket.demo-bucket will be created
  + resource "google_storage_bucket" "demo-bucket" {
      + effective_labels   = (known after apply)
      + force_destroy   = true
      + id   = (known after apply)
      + location   = "EU"
      + name   = "sunny-web-411214-terra-bucket"
      + project   = (known after apply)
      + public_access_prevention = (known after apply)
      + rpo   = (known after apply)
      + self_link   = (known after apply)
      + storage_class   = "STANDARD"
      + terraform_labels   = (known after apply)
      + uniform_bucket_level_access = (known after apply)
      + url   = (known after apply)

      + lifecycle_rule {
          + action {
              + type = "AbortIncompleteMultipartUpload"
            }
          + condition {
              + age   = 1
              + matches_prefix   = []
              + matches_storage_class = []

```
                    + matches_suffix       = []
                    + with_state           = (known after apply)
                  }
              }
          + lifecycle_rule {
              + action {
                  + type = "AbortIncompleteMultipartUpload"
                }
              + condition {
                  + age                  = 1
                  + matches_prefix       = []
                  + matches_storage_class = []
                  + matches_suffix       = []
                  + with_state           = (known after apply)
                }
            }
        }
    }

Plan: 2 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

  Enter a value: yes

google_bigquery_dataset.demo_dataset: Creating...
google_storage_bucket.demo-bucket: Creating...
google_bigquery_dataset.demo_dataset: Creation complete after 4s
[id=projects/sunny-web-411214/datasets/demo_dataset]
google_storage_bucket.demo-bucket: Creation complete after 5s
[id=sunny-web-411214-terra-bucket]

Apply complete! Resources: 2 added, 0 changed, 0 destroyed.
```