## 1. Draw knowledge graphs (both Schema and Data graphs)

Schema: (subject, relation/action, object)

(Fuel prices, changes, in airlines)

(United airlines, announced, Friday)

(United airlines, increased fares, \$6 per round on flights)

(America airlines, has unit, AMR)

(AMR, matched, the Move)

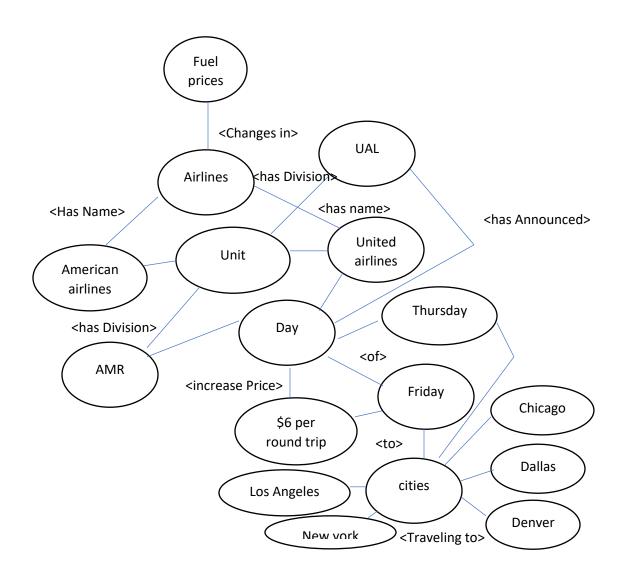
(United airlines, has unit, UAL)

(UAL, said, effective from Thursday night)

(Fares, applies, to some routes)

(routes, are, Chicago to Dallas and Atlanta and Denver to San Francisco, Los Angeles)

## Data graph:



- 2. Design question answering for the given input text. Try to include at least one questions for the following question types.
  - What are the airlines involved in increasing fuel prices?
  - Where is the Chicago flight heading to
  - When is the United airlines was announced about increasing fares
  - Who is the person announced from American airlines
  - How united airlines increased fares
  - How much fare increased for fuel price changes
  - Is increasing price effective immediately in American airlines