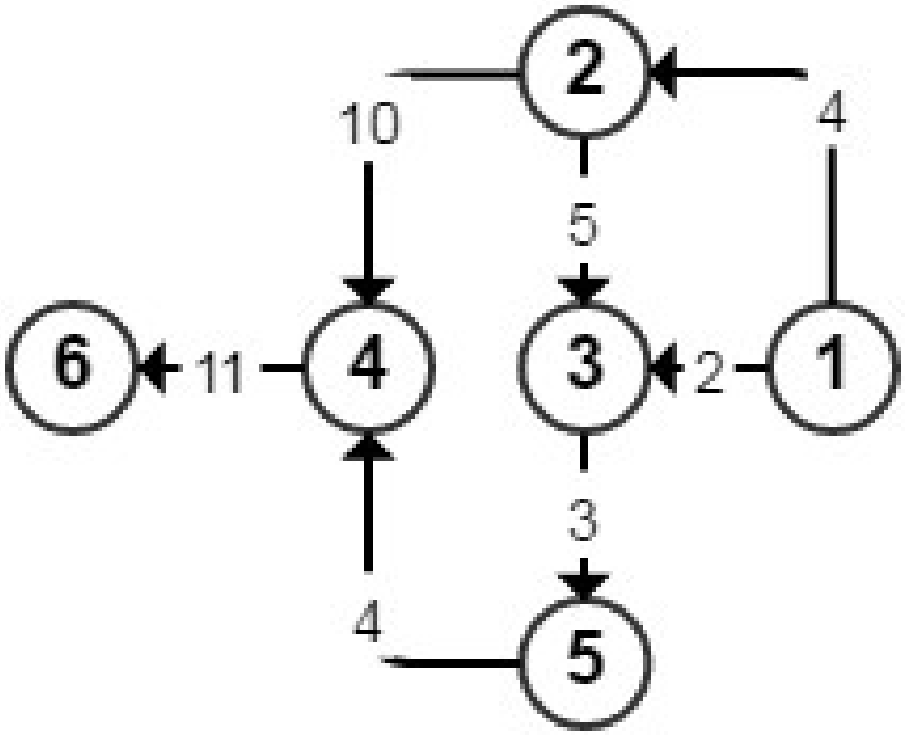
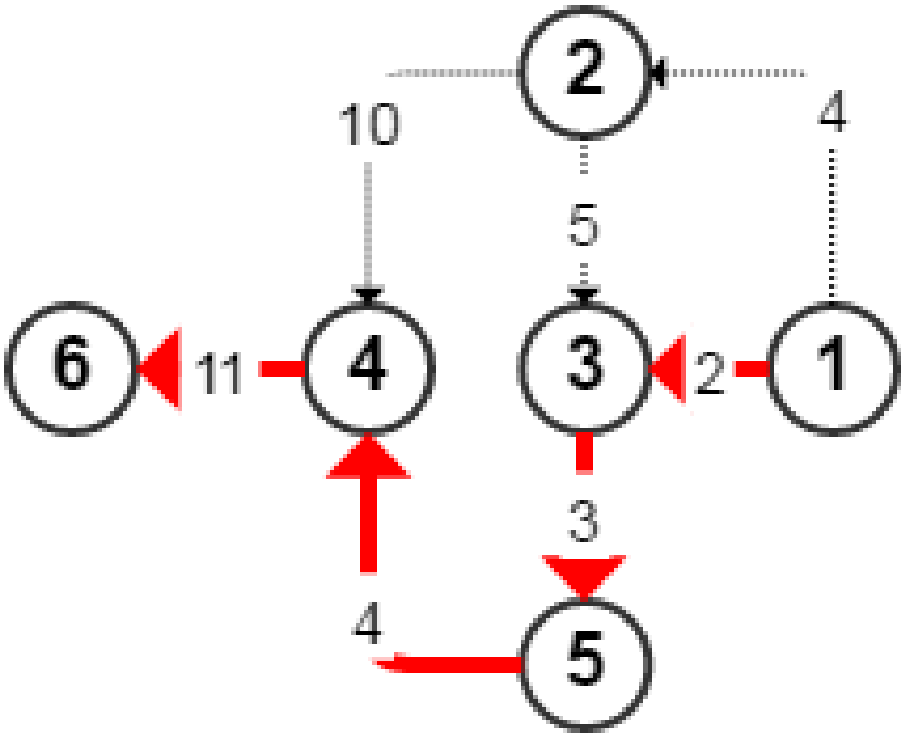
Pg****

https://github.com/raitraidma/tex

PgRouting

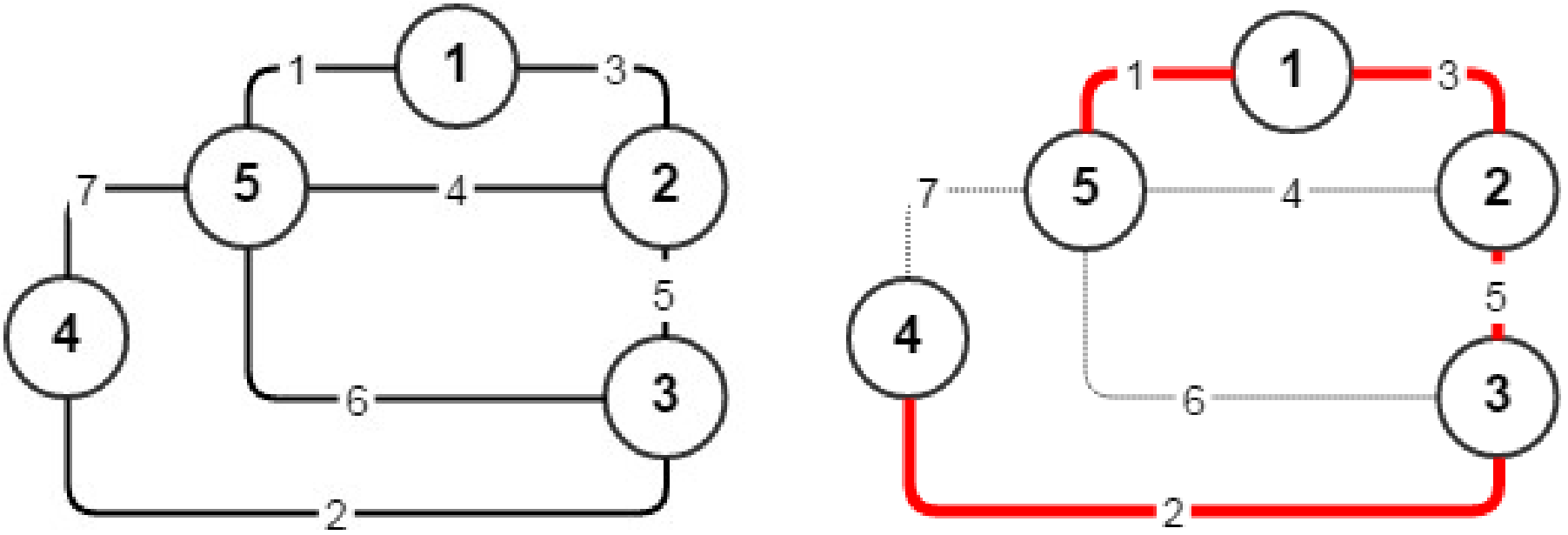
- http://pgrouting.org/
- pgr_dijkstra(edges_sql, start_vid, end_vid, directed);





PgGraph

- https://github.com/raitraidma/pggraph
- MST
- pggraph.kruskal(edges_sql);



PlPythonu

- CREATE OR REPLACE FUNCTION f_http_get(s_url TEXT)
  RETURNS text AS
  $$
  import *urllib2*
  try:
  result = urllib2.urlopen(s_url).read()
  except:
  result = ''
  return *result*
  $$
  LANGUAGE 'plpythonu'
  SECURITY DEFINER
  SET search_path=public, pg_temp;

PlPythonu

```
CREATE OR REPLACE FUNCTION f_geocode_lng_lat(
  IN s_address TEXT
, s_api_key VARCHAR
) RETURNS text ARRAY[2] AS
$$
from geopy.geocoders import GoogleV3
try:
  geolocator = GoogleV3(api_key=s_api_key)
  location = geolocator.geocode(s_address)
  lat, lng = location.latitude, location.longitude
except:
  lat, lng = 0, 0
return lng, lat
$$
LANGUAGE 'plpythonu'
  SECURITY DEFINER
  SET search_path=public, pg_temp;
```

PlPythonu

```
CREATE OR REPLACE FUNCTION f_geocode_address(
  IN d_latitude DOUBLE PRECISION
, IN d_longitude DOUBLE PRECISION
, s_api_key VARCHAR
) RETURNS text AS
$$
from geopy.geocoders import GoogleV3
try:
  geolocator = GoogleV3(api_key=s_api_key)
  location = geolocator.reverse(str(d_latitude) + ", " + str(d_longitude))
  address = location[0].address
except:
  address = ''
return address
$$
LANGUAGE 'plpythonu'
  SECURITY DEFINER
  SET search_path=public, pg_temp;
```

PgEnd