***核心api：***

**Amadeus：**

client.shopping.flight\_offers\_search.get(  
 originLocationCode=start\_place\_code,  
 destinationLocationCode=end\_place\_code,  
 departureDate=start\_date,  
 adults=traveller)

input: start Code, end Code, start data, traveler

output: response

response = client.shopping.hotel\_offers.get(latitude=latitude, longitude=longitude)

input: latitude, longitude

output: response

**opencage:**

result = geocoder.geocode(place, no\_annotations='1') # Geo-coding Service API key

input: start place

output: response

**googlemapes:**

directions\_result = gmaps.directions(origin=[sequence.latitude, sequence.longitude],  
 destination=[line\_sequence[sindex+1].latitude,  
 line\_sequence[sindex+1].longitude],  
 mode="transit")

input: start place latitude, longitude; end place latitude, longitude. Mode

output: response

response = gmaps.places\_nearby(location=[latitude, longitude], radius=10000, type=type)

input: radius latitude, longitude type