```
│   │   ├── str_to_enum(water_type)
│   │   └── datetime.strptime(ready_time)
│   ├── create_station_points(stations)
│   │   └── [Calculates distances between stations]
│   └── [Creates lookup dictionaries and categorizes tugboats by type]
│
├── TravelHelper.__new__() [Singleton instantiation]
├── TravelHelper.__init__()
├── TravelHelper._set_data(data)
│
├── Solution.__init__(data)
│   ├── TravelHelper.__new__() [Singleton check]
│   ├── TravelHelper._set_data(data)
│   └── [Initialize tugboat and barge schedules]
│
├── solution.generate_schedule(order_ids)
│   └── For each order_id:
│       └── solution.travel_import(order)
│           ├── assign_barges_to_single_order(order, barges)
│           │   ├── get_ready_barge(barge) [for each barge]
│           │   ├── haversine() [distance calculations]
│           │   └── barge.set_load()
│           │
│           ├── _bring_barge_travel_import(order, bring_down_river_barges)
│           │   ├── assign_barges_to_tugboats(order, river_tugboats, 
barges)
│           │   │   └── assign_barges_to_tugboat(tugboat, barges)
│           │   │       └── tugboat.assign_barge(barge)
│           │   │
│           │   ├── arrival_step_travel_empty_barges(order, tugboats, 
appointment_info)
│           │   │   ├── tugboat.calculate_collection_barge_time()
│           │   │   │   ├── sort_barges_by_distance()
│           │   │   │   │   └── haversine() [multiple calls]
│           │   │   │   ├── tugboat.calculate_speed()
│           │   │   │   └── TravelHelper.process_travel_steps()
│           │   │   │       ├── TravelHelper.get_distance_location()
│           │   │   │       │   └── haversine()
│           │   │   │       ├── TravelHelper.get_order_stations()
```

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