

### **Station ADT**

(station\_code, station\_name)

#### Setters

make\_station(station\_code, station\_name) → station

#### Getters

get\_station\_code(station) → station\_code

get\_station\_name(station) → station\_name

### **Train ADT**

(train\_code,)

#### Setters

make\_train(train\_code) → train

#### Getters

get\_train\_code(train) → train\_code

### **Line ADT**

#### Setters

make\_line(name, tuple\_of\_stations) → line

#### Getters

get\_line\_name(line) → name

get\_line\_stations(line) → tuple\_of\_stations

#### Related Functions

get\_station\_by\_name(line, station\_name) → station or None

get\_station\_by\_code(line, station\_code) → station or None

get\_station\_position(line, station\_code) → Number

### **TrainPosition ADT**

(is\_moving, from\_station, to\_station)

#### Setters

make\_train\_position(is\_moving, from\_station, to\_station) → train\_position

#### Getters

get\_is\_moving(train\_position) → True or False

get\_direction(line, train\_position) → 0 or 1

get\_stopped\_station(train\_position) → station or None

get\_previous\_station(train\_position) → station or None

get\_next\_station(train\_position) → station

### **ScheduleEvent ADT**

#### Setters

make\_schedule\_event(train, train\_position, time) → schedule\_event

#### Getters

get\_train(schedule\_event) → train

get\_train\_position(schedule\_event) → train\_position

get\_schedule\_time(schedule\_event) → time