

STATE AND NATIONAL PARKS

There are a number of national and state parks available to tourists.

- 1) Create a **Park** class.
- 2) Include **private** and **readonly fields**:
 - a) **_name**: the name of park (**string**),
 - b) **_address**: the address (**string**),
 - c) **_type**: the type of the facility (as an enum type, named **FacilityType**, that's either **National**, **State**, or **Local**),
 - d) **_phone**: phone number (**string**),
 - e) **_openingHour** as **int**: the opening hour
 - f) **_closingHour** as **int**: the closing hour,
 - g) **_fee** for entrance fee for adults (**decimal**) without a pass.
- 3) Create a constructor that can initialize all these data members (name of park, address, type of facility, phone number, opening hour, closing hour, and entrance fee in the same order). If the opening hour is later than the closing hour, then throw an **ArgumentOutOfRangeException**.
- 4) Create separate read-only properties:
 - a) **Info** that returns a string, consisting of the name of the park, the type of the park, the opening hours, and the fee of the park in this format: {name of the park} {type of the park} Park {opening hours (10 AM to 5 PM)} {fee:C};
 - b) **Contact**: that returns a string, consisting the phone number, a space, and then the address.
- 5) Create a method, named **CalculateFee**, that calculates, for a given number of visitors, and returns the cost of the park for a given number of visitors, i.e. $fee \times number$.
- 6) Create a class method, named **Show**, that takes an array of **Park**, which will display all the Park's Info and Park's Contact, separated by a space, on separate lines.
- 7) Create a class method, named **CalculateFee**, that takes a number of visitors and an array of **Park**, which will calculate and return the total visitor fees for all the parks in the array by invoking each Park's **CalculateFee** method.