**1.Monkey:**

Description:

Represents an individual monkey.

Fields:

name (String): The name of the monkey.

species (String): The species of the monkey.

sex (Sex): The sex of the monkey (enum).

size (String): The size of the monkey (small, medium, large).

weight (double): The weight of the monkey.

age (int): The approximate age of the monkey.

favoriteFood (Food): The favorite food of the monkey (enum).

Constructor:

Monkey(String name, String species, Sex sex, String size, double weight, int age, Food favoriteFood)

**2.Isolation:**

Description:

Represents a cage in isolation where monkeys are initially housed.

Fields:

capacity (int): Maximum capacity of monkeys in the isolation cage (20).

monkeysInIsolation (ArrayList<Monkey>): List of monkeys currently housed in isolation.

Constructor:

Isolation()

Methods:

addMonkey(Monkey monkey): Adds a monkey to the isolation cage.

removeMonkey(String monkeyName): Removes a monkey from the isolation cage.

getMonkeysInIsolation(): ArrayList<Monkey> - Returns the list of monkeys in isolation.

**Enclosure:**

Description:

Represents an enclosure for a specific species of monkeys.

Fields:

species (String): The species of monkeys housed in the enclosure.

monkeysInEnclosure (ArrayList<Monkey>): List of monkeys currently housed in the enclosure.

Constructor:

Enclosure(String species)

Methods:

addMonkey(Monkey monkey): Adds a monkey to the enclosure.

removeMonkey(String monkeyName): Removes a monkey from the enclosure.

getMonkeysInEnclosure(): ArrayList<Monkey> - Returns the list of monkeys in the enclosure.

**Sanctuary:**

Description:

Represents the overall sanctuary managing isolation cages and enclosures.

Fields:

isolationCages (ArrayList<IsolationCage>): List of isolation cages.

enclosures (HashMap<String, Enclosure>): Map of enclosures with species as keys.

Constructor:

Sanctuary()

Methods:

addMonkeyToIsolation(Monkey monkey): Adds a monkey to an available isolation cage.

moveMonkeyToEnclosure(Monkey monkey, String species): Moves a monkey from isolation to the specified enclosure.

getListOfMonkeys(): ArrayList<Monkey> - Returns an alphabetical list of all monkeys in the sanctuary.

getListOfMonkeysInEnclosure(String species): ArrayList<Monkey> - Returns a list of monkeys in the specified enclosure.

moveMonkeysFromIsolationToEnclosure（）: move monkey from isolation to enclosure.

**Enums:**

Sex:

Description: Represents the sex of a monkey.

Values: MALE, FEMALE

Food:

Description: Represents the favorite food of a monkey.

Values: EGGS, FRUITS, INSECTS, LEAVES, NUTS, SEEDS, TREE\_SAP