

	BPTree			
Field	No public field			
Constructor	BPTree(int branchingFactor)			
Method	Return Type	Name	Parameter List	Description
	void	insert	K key, V value	Inserts the key and value in the appropriate nodes in the tree Note: key-value pairs with duplicate keys can be inserted into the tree.
	List<V>	rangeSearch	K key, String comparator	Gets the values that satisfy the given range: key can be a number: ex. 2.5 comparator can be one of these: "<=", "==", ">=" ex. If given key = 2.5 and comparator = ">=": return all the values with the corresponding keys >= 2.5 If key is null or not found, return empty list. If comparator is null, empty, or not according to required form, return empty list.
	String	toString	N/A	Returns a string representation for the tree.
	FoodData			
Field	No public field			
Constructor	FoodData()			
Method	Return Type	Name	Parameter List	Description
	void	loadFoodItems	String filePath	Loads the data in the .csv file stored with foodItems' information. file format: <id1>,<name>,<nutrient1>,<value1>,<nutrient2>,<value2>,...
	List<F>	filterByName	String substring	Gets all the food items that have name containing the substring.
	List<F>	filterByNutrients	List<String> rules	Gets all the food items that fulfill ALL the provided rules.
	void	addFoodItem	FoodItem foodItem	Adds a food item to the loaded data.
	List<FoodItem>	getAllFoodItems	N/A	Gets the list of all food items.
	void	saveFoodItems	String filename	Save the list of food items in ascending order by name
	FoodItem			
Field	No public field			
Constructor	FoodItem(String id, String name)			
Method	Return Type	Name	Parameter List	Description
	String	getName	N/A	Get name of a food item.
	String	getID	N/A	Gets the unique id of the food item.
	HashMap<String, Double>	getNutrients	N/A	Gets the nutrients of the food item.
	void	addNutrient	String name, double value	Adds a nutrient and its value to this food. If nutrient already exists, updates its value.
	double	getNutrientValue	String name	Returns the value of the given nutrient for this food item.