

Variable	VARIABLE_NAME : str VARIABLE_NUMBER : int datatype_filler : bool lower_bound : float name : str type : Optional[VariableType] upper_bound : float	clone(): typing.Self get_binary_variable(name: str): typing.Self get_continuous_variable(name: str): typing.Self get_datatype_filler_type(): bool get_integer_variable(name: str): typing.Self get_lower_bound(): float get_new_variable(v_type: VariableType): typing.Self get_semi_continuous_variable(name: str): typing.Self get_type(): VariableType get_upper_bound(): float set_binary_variable(): None set_datatype_filler_variable(): None set_name(name: str): None set_type(v_type: VariableType): None
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Solution	CONSISTENT_KB : bool INCONSISTENT_KB : bool consistent : bool showed_variables : dict[str, float] sol : typing.Union[bool, float]	add_showed_variable(var_name: str, value: float): None get_showed_variables(): dict[str, float] get_solution(): typing.Union[bool, float] is_consistent_kb(): bool
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ShowVariablesHelper	abstract_fillers : dict[str, set[str]] concepts : set[str] concrete_fillers : dict[str, set[str]] global_abstract_fillers : set[str] global_concrete_fillers : set[str] individuals : set[str] labels_for_fillers : dict[str, list[FuzzyConcreteConcept]] variables : dict[Variable, str]	add_abstract_filler_to_show(role_name: str): None add_concept_to_show(conc_name: str): None add_concrete_filler_to_show(f_name: str): None add_individual_to_show(ind_name: str): None add_variable(var: Variable, name_to_show: str): None clone(): typing.Self get_labels(var_name: str): list[FuzzyConcreteConcept] get_name(var: Variable): str get_variables(): list[Variable] show_abstract_role_fillers(role_name: str, ind_name: str): bool show_concepts(concept_name: str): bool show_concrete_fillers(f_name: str, ind_name: str): bool show_individuals(ind_name: str): bool show_variable(var: Variable): bool
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var

Term	coeff : float var	clone(): typing.Self get_coeff(): float get_var(): Variable
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MILPHelper	PARTITION : bool PRINT_LABELS : bool PRINT_VARIABLES : bool cardinalities : list[SigmaCount] constraints : list[Inequation] crisp_concepts : set[str] crisp_roles : set[str] nominal_variables : bool number_of_variables : dict[str, int] show_vars string_features : set[str] string_values : dict[int, str] variables : list[Variable]	add_cardinality_list(sc: SigmaCount): None add_contradiction(): None add_crisp_concept(concept_name: str): None add_crisp_role(role_name: str): None add_equality(var1: Variable, var2: Variable): None add_new_constraint(expr: Expression, constraint_type: InequalityType): None add_string_feature(role: str): None add_string_value(value: str, int_value: int): None change_variable_names(old_name: str, new_name: str, old_is_created_individual: bool): None check_if_replacement_is_needed(v1: Variable, s1: str, v2: Variable, s2: str): bool clone(): typing.Self exists_nominal_variable(i: str): bool exists_variable(a: Individual, b: Individual, role: str): bool get_name_for_integer(i: int): typing.Optional[str] get_negated_nominal_variable(i1: str, i2: str): Variable get_new_variable(v_type: VariableType): Variable get_nominal_variable(i1: str): Variable get_number_for_assertion(ass: Assertion): int get_ordered_permutation(x: list[Variable]): list[Variable] get_variable(var_name: str): Variable has_nominal_variable(terms: list[Term]): bool has_variable(name: str): bool is_crisp_concept(concept_name: str): bool is_crisp_role(role_name: str): bool is_nominal_variable(i: str): bool optimize(objective: Expression): typing.Optional[Solution] print_instance_of_labels(f_name: str, ind_name: str, value: float): None set_binary_variables(): None set_nominal_variables(value: bool): None solve_gurobi(objective: Expression): typing.Optional[Solution] solve_mip(objective: Expression): typing.Optional[Solution] solve_pulp(objective: Expression): typing.Optional[Solution]
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show vars

show vars

Expression	constant : Union terms : list[Term]	add_constant(expr: typing.Self, constant: constants.NUMBER): typing.Self add_expressions(expr1: typing.Self, expr2: typing.Self): typing.Self add_term(term: Term): None add_term(exp: typing.Self, term: Term): typing.Self clone(): typing.Self get_constant(): constants.NUMBER get_constant_term(var: Variable): constants.NUMBER get_terms(): list[Term] increment_constant(): None multiply_constant(expr: typing.Self, constant: constants.NUMBER): typing.Self negate_expression(expr: typing.Self): typing.Self set_constant(constant: constants.NUMBER): None subtract_expressions(expr1: typing.Self, expr2: typing.Self): typing.Self
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expr

Inequation	expr type : InequalityType	clone(): typing.Self equal_to(exp: Expression): typing.Self get_constant(): float get_string_type(): str get_terms(): list[Term] get_type(): InequalityType greater_than(exp: Expression): typing.Self is_zero(): bool less_than(exp: Expression): typing.Self
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