Programción Lógica

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code

Usage and interface

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  `:- use_module(/home/ferzuck/Documents/Prolog/code.pl).`
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Documentation on exports

author_data/4: PREDICATE

Usage: `author_data(Name,LastName,LastName2,Matricula)`

Author of the script.

pos/2: REGTYPE

Usage: `pos(Row,Col)`

Represents a position on the board

op/2: REGTYPE

Usage: `op(Op,Val)`

Represents an operation

cell/2: REGTYPE

Usage: `cell(pos,op)`

Represents a cell on the board

board1/1: PREDICATE

Usage: `board1(Board)`

`Board` is the definition of the board itself.

efectuar_movimiento/3: PREDICATE

Usage: `efectuar_movimiento(Pos,Dir,NewPos)`

`NewPos` is the position resulting from moving from `Pos` in the direction specified by `Dir`.

movimiento_valido/3: PREDICATE

Usage: `movimiento_valido(N,Pos,Dir)`

Checks if a movement in the given direction `Dir` is valid for the board of size `N` with the current position `Pos`.

select_cell/4: PREDICATE

Usage: `select_cell(IPos,Op,Board,NewBoard)`

Extracts the cell with position `IPos` from the `Board`, obtaining the operation `Op`, and a new board `NewBoard` without that cell.

select_dir/3: PREDICATE

Usage: `select_dir(Dir,Dirs,NewDirs)`

Extracts a direction `Dir` from the list of directions `Dirs`, obtaining a new list of directions `NewDirs`.

aplicar_op/3: PREDICATE

Usage: `aplicar_op(Op,Valor,Valor2)`

Applies the operation `Op` to the value `Valor`, resulting in `Valor2`.

generar_recorrido/6: PREDICATE

Usage:
`generar_recorrido(Ipos,N,Board,DireccionesPermitidas,Recorrido,Valor)`

Generates a path `Recorrido` and a value `Valor` by exploring the board from the initial position `Ipos` using the allowed directions `DireccionesPermitidas` and the operations on the cells `Board`.

generar_recorrido_aux/8: PREDICATE

Usage: `generar_recorrido_aux(Ipos,N,Board,DireccionesPermitidas,Recorrido,Valor,Valor,Recorrido)`

Auxiliar predicate for generar_recorrido.

generar_recorridos/5: PREDICATE

Usage: `generar_recorridos(N,Board,DireccionesPermitidas,Recorrido,Valor)`

Generates multiple paths `Recorrido` and values `Valor` by exploring the board of size `N` using the allowed directions `DireccionesPermitidas` and the operations on the cells `Board`.

generar_posiciones/2: PREDICATE

Usage: `generar_posiciones(N,Pos)`

Generates all possible positions `Pos` on a board of size `N`.

tablero/5: PREDICATE

Usage:

`tablero(N,Tablero,DireccionesPermitidas,ValorMinimo,NumeroDeRutasConValorMinimo)`

`ValorMinimo` unifies with the minimum final value that can be obtained by considering all possible routes starting from any cell on the N-dimensional board, using only the movements indicated in the `DireccionesPermitidas` list.

Documentation on multifiles

Σcall_in_module/2: PREDICATE

No further documentation available for this predicate. The predicate is *multifile*.

Documentation on imports

This module has the following direct dependencies:

– *Application modules:*

`operators`, `dcg_phrase_rt`, `datafacts_rt`, `dynamic_rt`, `classic_predicates`.

– *Internal (engine) modules:*

`term_basic`, `arithmetic`, `atomic_basic`, `basiccontrol`, `exceptions`, `term_compare`, `term_typing`, `debugger_support`, `hiord_rt`, `stream_basic`, `io_basic`, `runtime_control`, `basic_props`.

– *Packages:*

`prelude`, `initial`, `condcomp`, `classic`, `runtime_ops`, `dcg`, `dcg/dcg_phrase`, `dynamic`, `datafacts`, `assertions`, `assertions/assertions_basic`, `regtypes`.