

INE 5416 Paradigmas de Programação

Paradigma Lógico: 1º Trabalho

Gustavo Olegário

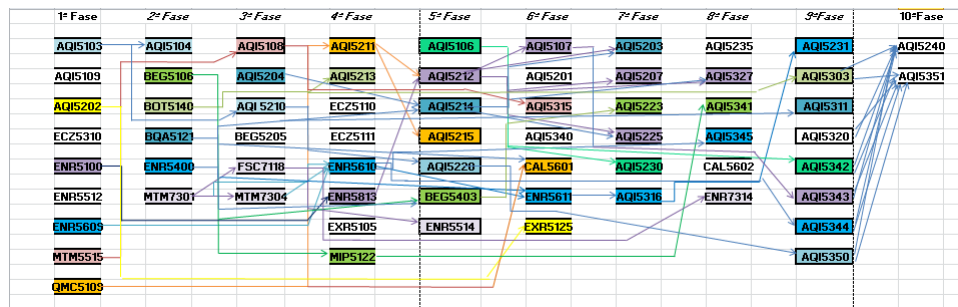
August 21, 2016

1 Introdução

Durante o segundo semestre de 2016, na disciplina INE 5416 - Paradigmas de Programação, no que se refere ao paradigma lógico, o professor Alexandre solicitou aos alunos que cada um fizesse um programa em ProLog que reconhecesse matérias e pré-requisitos de um curso. Ao aluno Gustavo Olegário, foi atribuído o curso de Engenharia de Aquicultura. Além disso foi solicitado uma representação da grade do curso. O currículo escolhido pelo professor foi este:

<http://cagr.sistemas.ufsc.br/relatorios/curriculoCurso?curso=234&curriculo=20101>

2 Grade



3 Funcionalidades

Para cada funcionalidade requisitada, é apresentado um 'print' do terminal mostrando a devida funcionalidade.

3.1 Disicplina e fase

```
Terminal - olegario@coruscant:/home/olegario
File Edit View Terminal Tabs Help
[olegario@coruscant ~]$ swipl Gustavo_Olegario_trabalho_I.pl
Welcome to SWI-Prolog (Multi-threaded, 64 bits, Version 7.2.3)
Copyright (c) 1990-2015 University of Amsterdam, VU Amsterdam
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software,
and you are welcome to redistribute it under certain conditions.
Please visit http://www.swi-prolog.org for details.

For help, use ?- help(Topic). or ?- apropos(Word).

?- materia('AQIS201',FASE).
FASE = 6.

?-
```

3.2 Disciplinas de uma fase

```
Terminal - olegario@coruscant
File Edit View Terminal Tabs Help
[olegario@coruscant ~]$ swipl Gustavo_Olegario_trabalho_I.pl
Welcome to SWI-Prolog (Multi-threaded, 64 bits, Version 7.2.3)
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For help, use ?- help(Topic). or ?- apropos(Word).

?- materia(MATERIA,1).
MATERIA = 'AQI5103' ;
MATERIA = 'AQI5109' ;
MATERIA = 'AQI5202' ;
MATERIA = 'ECZ5310' ;
MATERIA = 'ENR5100' ;
MATERIA = 'AQI5512' ;
MATERIA = 'AQI5609' ;
MATERIA = 'MTM5515' ;
MATERIA = 'QMC5109'.

?-
```

3.3 Pré requisitos de uma disciplina

```
Terminal - olegario@coruscant/home/olegario
File Edit View Terminal Tabs Help
[olegario@coruscant ~]$ swipl Gustavo_Olegario_trabalho_I.pl
Welcome to SWI-Prolog (Multi-threaded, 64 bits, Version 7.2.3)
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Please visit http://www.swi-prolog.org for details.

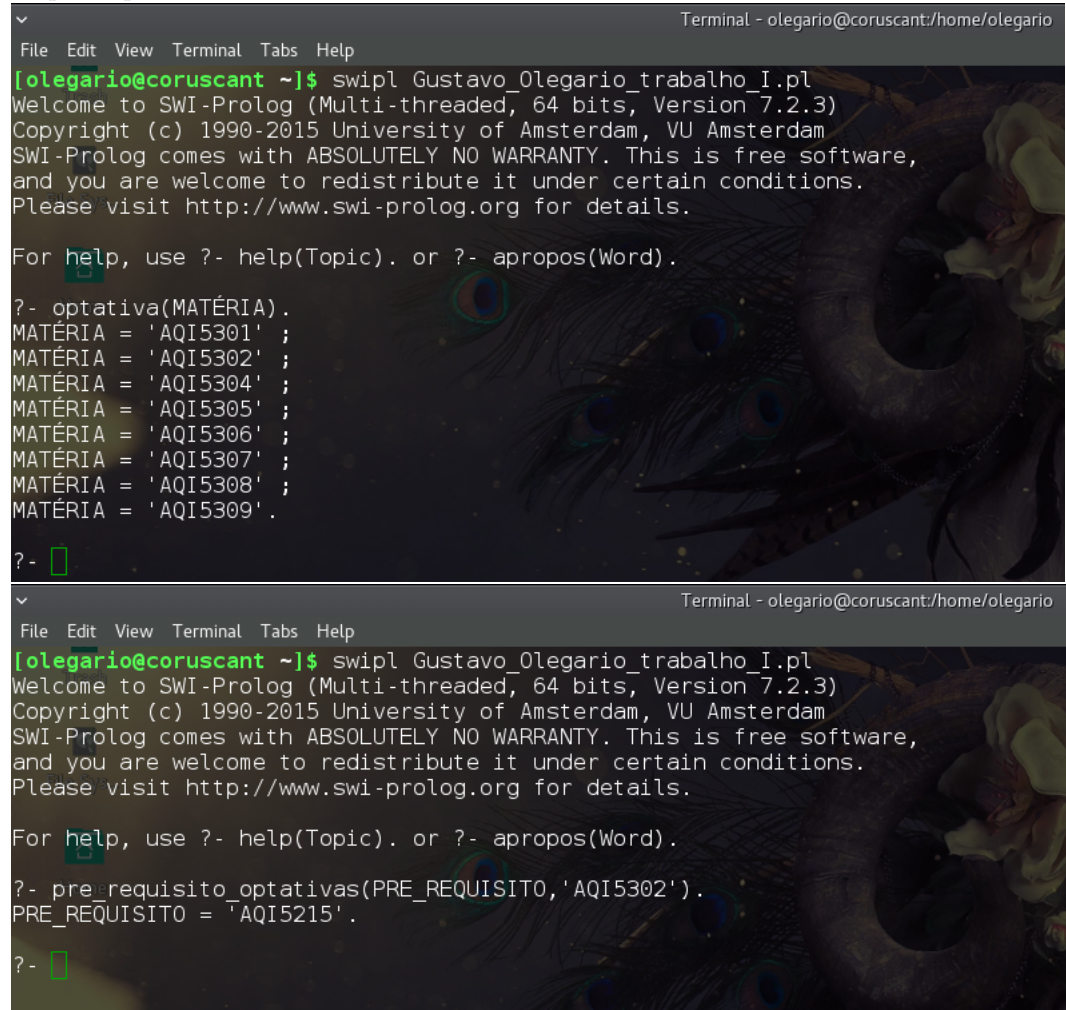
For help, use ?- help(Topic). or ?- apropos(Word).

?- pre_requisito(MATERIAS,'AQI5212').
MATERIAS = ['AQI5211', 'ENR5813'].

?-
```

3.4 Funcionalidade Extra

Para a funcionalidade extra, escolheu-se exibir algumas disciplinas optativas e seus pré-requisitos.



```
Terminal - olegario@coruscant:/home/olegario
File Edit View Terminal Tabs Help
[olegario@coruscant ~]$ swipl Gustavo_Olegario_trabalho_I.pl
Welcome to SWI-Prolog (Multi-threaded, 64 bits, Version 7.2.3)
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and you are welcome to redistribute it under certain conditions.
Please visit http://www.swi-prolog.org for details.

For help, use ?- help(Topic). or ?- apropos(Word).

?- optativa(MATÉRIA).
MATÉRIA = 'AQI5301' ;
MATÉRIA = 'AQI5302' ;
MATÉRIA = 'AQI5304' ;
MATÉRIA = 'AQI5305' ;
MATÉRIA = 'AQI5306' ;
MATÉRIA = 'AQI5307' ;
MATÉRIA = 'AQI5308' ;
MATÉRIA = 'AQI5309' .
?- 
```

```
Terminal - olegario@coruscant:/home/olegario
File Edit View Terminal Tabs Help
[olegario@coruscant ~]$ swipl Gustavo_Olegario_trabalho_I.pl
Welcome to SWI-Prolog (Multi-threaded, 64 bits, Version 7.2.3)
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and you are welcome to redistribute it under certain conditions.
Please visit http://www.swi-prolog.org for details.

For help, use ?- help(Topic). or ?- apropos(Word).

?- pre_requisito_optativas(PRE_REQUISITO,'AQI5302').
PRE_REQUISITO = 'AQI5215' .
?- 
```