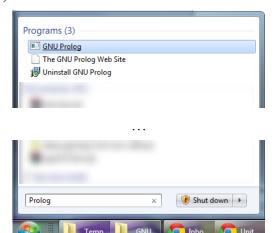
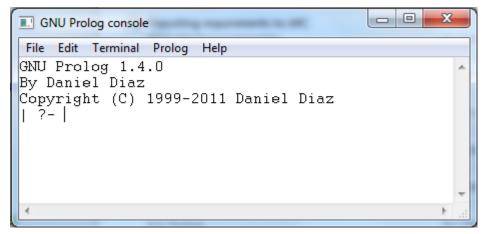
## GETTING STARTED WITH GNU PROLOG (On a Windows PC – Semester 1, 2017)

- Log on to a Windows lab computer.
- From the start menu either browse to GNU Prolog, or simply type "Prolog" into the search bar (as below).



• **GNU Prolog** should now load and you should see a Prolog window with a command prompt: | ?- (as below).



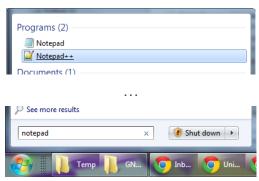
• To test that Prolog is working, type the statement **write('Hello World').** at this prompt. Make sure that there is no space between write and (, that you use single quotes (') not double-quotes (") around the Hello World, and that you type in the full stop (.) at the end of the statement. Then press the Enter key, to get Prolog to execute the statement.

You should get the answer back Hello World on the next line, followed by a blank line, and then the running time in brackets followed by yes. For example:

```
| ?- write('Hello World').
Hello World
yes
```

- Prolog can be used in this interactive manner, but we will write Prolog programs in an editor.
- Prolog can be downloaded for home use from: <a href="http://www.gprolog.org/">http://www.gprolog.org/</a>.

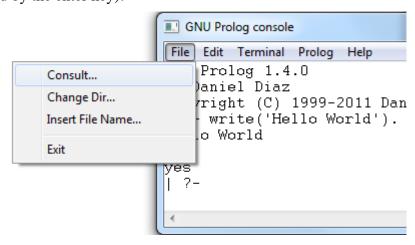
• Open a text editor. We will use **Notepad++**. From the start menu either browse to it, or search for it as shown below (try not to open regular Notepad, that's not as useful for Prolog):



- A window will pop-up with the title 'new 1' (or it might be a changelog or something).
- We are using **Notepad++** as it can be configured to understand Prolog files and provide syntax highlighting. Set this up by first downloading the required profile file (<a href="http://www.gprolog.org/userDefineLang-GNU\_Prolog.xml">http://www.gprolog.org/userDefineLang-GNU\_Prolog.xml</a>) and saving it in your profile. Then go to the "Language" menu, chose "Define your own language", click on "Import" and select the downloaded .xml file from wherever you saved it. From now on, Notepad++ will recognise files suffixed with ".pl" (and ".pro") as Prolog files.
- Click inside the **Notepad++** window and type in the following two Prolog statements: **female(sue).**

male(fred).

- Hit the Save button and give the filename **familytree.pl** (you should save all Prolog files with a .pl extension) and choose an appropriate destination in your home directory.
- Now click back in the **GProlog** console window.
- Choose "Consult..." from the file menu and browse to where you saved your file (This can also be done as a Prolog command via **consult('<full-path>/familytree.pl').** followed by the enter key).



- This will load in the very simple family tree knowledge-base you have just created. Every time you make a change to your source file you need to tell Prolog to consult that file again.
- Type **female(sue).** and press enter. The answer **yes** should appear. Then type **female(fred).** and press enter. Prolog should respond with a **no**.
- Notepad++ can be downloaded for home use from: <a href="http://notepad-plus-plus.org">http://notepad-plus-plus.org</a>.