Worksheet 3

In this class we'll start with the Yap C API and binding Yap to MySQL. The Foreign Code Interface of the Yap Manual is the relevant section of the manual. The first two exercises are implemented in this section, so you should follow the description and replicate the code. The next exercises already involve the connection between Yap and MySQL.

Exercise 1
Create a predicate my_process_id(Id) that succeeds when Id matches the number of the process under which Yap is running.

Exercise 2
Create a predicate n100(N) that, when called with an instantiated argument, will succeed if that argument is an integer less than or equal to 100, and, when called with an uninstantiated argument, will backtrack all positive integers less than or equal to 100.

Exercise 3
Create a db_connect(Host, User, Passwd, Database, ConnHandler) predicate that establishes a connection to MySQL, returning the connection handler in ConnHandler when it succeeds.

Exercise 4
Create a db_query(ConnHandler, SQL, ResultSet) predicate that, given a MySQL connection identifier in ConnHandler, an SQL string in SQL, returns a pointer to a MySQL Result Set in ResultSet.