

H2 - The Java SQL Database

<http://www.h2database.com/>

GENERAL TIPS

- H2 can be used in embedded mode or server mode;
- user names are not case-sensitive, but passwords are;
- SQL commands are not case-sensitive;
- keywords are uppercase;
- names given by user are lowercase;
- fields of the type string (varchar) have their values given between single quotation marks;
- dates must be given between single quotation marks and obey the format: YYYY-mm-dd;
- for the current date, use: CURRENT_DATE;
- by default, H2 runs in autocommit mode, which means that when we modify a table, H2 stores the modifications permanently. If you need to disable this, uncheck the checkbox in the top left corner;
- in the top right corner, the option Auto Complete is set as Total, which helps to construct the SQL commands.

INSTALLATION H2 (for Linux)

- (2) Download the program from: <http://www.h2database.com/html/main.html>
- (3) extract to a folder;
- (4) in a terminal, inside the folder h2->bin, type: java -jar h2*.jar

CONSTRUCTION AND CONFIGURATION OF A DATABASE IN H2 (in Linux)

Configuration (in the browser):

- choose the desired language;
- In Active Configuration, select: Generic H2 (Server);
- add the name of the database: progweb
- user and password: admin

Creating a table:

create table students (id integer PRIMARY KEY AUTO_INCREMENT NOT NULL, name VARCHAR(255), email VARCHAR(255), address VARCHAR(255));

COMMANDS FOR MODIFYING A DATABASE

(1) Inserting records:

insert into students (name,email,address) values ('Paul','paul@gmail.com','Rue Viau');

(2) Updating records:

update students set name='Martine' where id=1;

(3) Removing records:

delete from students where id=1;

(4) Searching for a record:

select name from students where id=2;

(5) Listing records:

select * from students order by name;