Junior programmer (SQL)

Why indexes should be used?

Indexes in the database simplify and speed up data retrieval

(Мы используем индексы в БД, что бы ускорить процесс поиска информации в ней)

2. Where foreign key should be used and why?

A foreign key can be used in tables which there is communications with other tables

(Для взаимосвязи между несколькими таблицами, мы его используем для связи полей)

3. What is SQL Injection and how to prevent it?

This malicious code can damage the database. For protection from it, you must use the input data processing, like htmlspecialchars or preg_match () and etc.

(Вредоносный код который поступает к нам на сервер в целях навредить БД, что бы такого не случилось необходимо обрабатывать входные данные)

4. Create query that counts number of cars for each car manufacturer in following table:

Table: cars

id (int)

name (varchar 255)

manufacturer_id (int)

SELECT COUNT(Id), name
 FROM cars
 GROUP BY manufacturer_id

5. Create simple product list script:

Let there be two tables - for product types and for products - they are bound with one-to-many relation

Types will have names

Products will have names, prices and types

Let user add new products via form, that will have inputs for name, price and type (type will be selected from drop-down list)

Further display list of every product that will contain product name, type and price Furthermore, display table that will list sum of product prices for each product type

6. Take product list from above task, and make it paginated

7. When should we prefer PDO prepared statements vs PDO queries and why?

prepare - Prepares a statement for execution and after we execute sql,

query - Executes an SQL statement, returning a result

8. How to access multiple databases on single PDO connection?