Sql joins:-

I shared my experience of using two LEFT JOINS in a single SQL query.

I have 3 tables:

Table 1) Patient consists columns PatientID, PatientName

Table 2) Appointment consists columns AppointmentID, AppointmentDateTime, PatientID, DoctorID

Table 3) Doctor consists columns DoctorID, DoctorName

Query:

SELECT Patient.patientname, AppointmentDateTime, Doctor.doctorname

FROM Appointment

LEFT JOIN Doctor ON Appointment.doctorid = Doctor.doctorId //have doctorId column common

LEFT JOIN Patient ON Appointment.PatientId = Patient.PatientId //have patientid column common

WHERE Doctor.Doctorname LIKE 'varun%' // setting doctor name by using LIKE

AND Appointment.AppointmentDateTime BETWEEN '1/16/2001' AND '9/9/2014' //comparison b/w dates

ORDER BY AppointmentDateTime ASC; // getting data as ascending order

# MySQL JOIN and three or more tables

Sometimes you might need to JOIN data from more than two tables. This can get very confusing so another alternative is to have multiple queries. Do the initial JOIN of two tables and then for every entry in the results from that run a query on the third table and so on. This obviously puts a major load on the server though so try to use one query where you can:

SELECT \* FROM Country

JOIN CountryLanguage ON

Country.Code=CountryLanguage.CountryCode

JOIN City ON

Country.Code=City.CountryCode;

As these are [INNER joins](https://www.yourwebskills.com/mysqljoin.php) you will only get data from the tables where the country code also appears in the City and CountryLanguage tables. If you wanted to see all countries even if there were no listed cities or languages you would use an OUTER join:

SELECT \* FROM Country

LEFT OUTER JOIN CountryLanguage ON

Country.Code=CountryLanguage.CountryCode

LEFT OUTER JOIN City ON

Country.Code=City.CountryCode;

To try either of these you will need to import the [world database](http://downloads.mysql.com/docs/world_innodb.sql.zip) provided on the [MySQL download page](http://dev.mysql.com/doc/index-other.html). Check the page on how to [import databases using PHPMyAdmin](http://www.yourwebskills.com/dbphpmyadminimport.php) if you need to.

Note that the above examples are actually one line queries but have been laid out on multiple lines to make them easier to understand. You can do that with your queries as any line breaks or tabs are ignored by the server. Use any layout which works for you. The server recognises the end of each query by the semi-colon.

**Parents and children**

In the above example both CountryLanguage and City are on the many side of a relationship with Country. MySQL knows this because the ON statements specify what is related to what. If you wanted to you could also use a three-tier structure where (as a theoretical example) Country

is the child of Continent and City is the child of Country:

SELECT \* FROM Continent

LEFT OUTER JOIN Country ON

Continent.Code=Country.ContinentCode

LEFT OUTER JOIN City ON

Country.Code=City.CountryCode;

The third table is linked to the second and not the first. This is also a good example of where an OUTER join is needed because Antarctica has no cities but you would probably want it to appear in the list of continents.

Magento 2 Interview Question

* **What is Magento?**

<https://rishabhrkrai.wordpress.com/2016/09/16/magento-introduction/>

* **What is EAV in Magento?**

EAV, stands for **Entity Attribute Value**, is a technique which allows you to add unlimited columns to your table virtually. EAV also known as **object attribute value model** and **open schema**.

**Entity (E)**: Entity actually refers to data item. For example we can consider it as customer, category or product.

**Attribute (A)**: Attribute refers to the different attributes of the Entity. Like for example product have different attributes like color, size, price, etc.

**Value (V)**: Value refers to the actual value of the attribute of the entity. Like color has value red, price has value $25, etc.

In EAV, you have one table which holds all the “attribute” (table field names) data, and other tables which hold the “entity” (id or primary id) and value (value for that id) against each attribute.

In Magento, there is one table to hold attribute values called *eav\_attribute* and 5-6 tables which holds entity and data in fully normalized form,

eav\_entity, eav\_entity\_int (for holding Integer values),

eav\_entity\_varchar (for holding Varchar values),

eav\_entity\_datetime (for holding Datetime values),

eav\_entity\_decimal (for holding Decimal/float values),

eav\_entity\_text (for holding text (mysql Text type) values).

EAV is expensive and should only be used when you are not sure about number of fields in a table which can vary in future. To just get one single record, Magento joins 4-5 tables to get data in EAV. But this doesn’t mean that EAV only has drawbacks. The main **advantage of EAV** is adding the table column will not affect the previously saved records (also the extra space will not get allocated!) and all the new records will seamlessly have data in these columns without any problem.

* **Which command is used to enable or disable a magento2 module?**

php bin/magento module:enable NameSpace\_ModuleName  
php bin/magento module:disable NameSpace\_ModuleName

* **Which files are necessary to install – upgrade database tables and to records in it?**

Normally, there are four files for this listed below

1. *InstallSchema*
2. *UpgradeSchema*
3. *InstallData*
4. *UpgradeData*

* **What are the recommended steps to be followed before Magento2 programming?**

*Before development starts, disable whole cache.  
Set Development mode as SetEnv MAGE\_MODE developer in .htacces or run the command*php bin/magento deploy:mode:set developer *Switch off xdebug (php.ini settings) in development environment mode so process can run faster.*

* **Which file is responsible for keeping database credentials in Magento2?**

*Its env.php situated at app/etc/ folder.*

* **Which file stores the vendor path?**

*Its vendor\_path.php situated at app/etc/ folder.*

* **Which class Magento 2 helper extend?**

*\Magento\Framework\App\Helper\AbstractHelper*

* **Which function refers the action in any controller file?**

*Its execute() function*

* **What is the difference between cache:clean and cache:flush?**

*Typically, cache:clean deletes all enabled cache related to magento whereas cache:flush deletes the whole cache storage, whether its magento cache or any third party cache (whether enabled or disabled)*

* **What is resource attribute for admin menu item?**

*resource attribute defines the ACL rule, that a user must have in order to access this Menu Item*

* **Where does all core modules are located in Magento2?**

*They are under vendor/magento folder.*

* **Where are the module’s base definition file?**

*They are at app/code/Module/etc/module.xml.*

### 1. What is Magento?

Magento is an open source-ecommerce web application developed by Varien, launched on 31st March 2008. Magento was built by using the part of Zend Framework and using the EAV (entity-attribute-value) database model to save the data. Now Magento is divison of eBay. On June 6 2011 eBay owns 100% of Magento.

### 2. Why use Magento 2?

Magento was stripped down and rebuilt from scratch to what is now a quicker, easier, and safer Magento 2 version.

Some of its advantages include:

* It is very fast
* It’s have New File Structure
* It’s have New Layout Elements
* CSS Preprocessing
* Magento UI Library
* Improved performance and scalability
* Reducing upgrade efforts and costs

### 3. What are the features of Magento 2?

Here are the following key features of Magento 2:

* Open and flexible architecture
* Enhanced business agility and productivity
* Engaging shopping experiences
* Grade scalability and performance of the enterprise
* Easier upgrades and maintenance
* Secure Payments
* Backup/Rollback system

### 4. What is MVC Architecture?

MVC, or Model, View, Controller, is a type of architecture in which business logic, data access, and user interface are separated for applications. MVC has two different types: configuration-based and convention-based. However, Magento uses the configuration-based version. This means that to get a module’s config file to work, everything must be specified to it.

### 5. What is EAV in Magento?

EAV, stands for Entity Attribute Value, is a technique which allows you to add unlimited columns to your table virtually. EAV also known as object attribute value model and open schema.

**Entity (E):** Entity actually refers to data item. For example we can consider it as customer, category or product.

**Attribute (A):** Attribute refers to the different attributes of the Entity. Like for example product have different attributes like color, size, price, etc.

**Value (V):** Value refers to the actual value of the attribute of the entity. Like color has value red, price has value $25, etc.

### 6. Which command is used to enable or disable a magento2 module?

php bin/magento module:enable NameSpace\_ModuleName

php bin/magento module:disable NameSpace\_ModuleName

### 7. Which file stores the vendor path?

Its vendor\_path.php situated at **app/etc/** folder.

### 8. Which file is responsible for keeping database credentials?

Its env.php situated at **app/etc/** folder.

### 9. Which class Magento 2 helper extend?

\Magento\Framework\App\Helper\AbstractHelper

### 10. Which function refers the action in any controller file?

Its execute() function.

### 11. Which command is used to enable or disable a magento2 cache?

php bin/magento cache:enable

php bin/magento cache:disable

### 12. What is the difference between cache:clean and cache:flush?

Typically, cache:clean deletes all enabled cache related to magento whereas cache:flush deletes the whole cache storage, whether its magento cache or any third party cache (whether enabled or disabled)

### 13. What is resource attribute for admin menu item?

Resource attribute defines the ACL rule, that a user must have in order to access this Menu Item.

### 14. Where does all core modules are located in Magento2?

They are under vendor/magento folder.

### 15. Where are the module’s base definition file?

They are at app/code/Module/etc/module.xml.

### **Magento Interview Questions and Answers**

### Q 1. What is Magento?

### Ans. Magento is a feature-rich eCommerce platform built on open-source technology that provides online merchants with unprecedented flexibility and control over the look, content and functionality of their eCommerce store. Magentos intuitive administration interface features powerful marketing, search engine optimization and catalog-management tools to give merchants the power to create sites that are tailored to their unique business needs. Designed to be completely scalable and backed by Variens support network, Magento offers companies the ultimate eCommerce solution.

### Q 2. What is the difference between Mage::getSingletone() andMage::getModel() in Magento

### Ans. Mage::getSingletone() always finds for an existing object if not then create that a newobject but Mage::getModel() always creates a new object.

### Q 3. Why Magento use EAV database model ?

### Ans. In EAV database model, data are stored in different smaller tables rather than storing in asingle table.product name is stored in catalog\_product\_entity\_varchar tableproduct id is stored in catalog\_product\_entity\_int tableproduct price is stored in catalog\_product\_entity\_decimal tableMagento Use EAV database model for easy upgrade and development as this model givesmore flexibility to play with data and attributes.

### Q 4. How to upgrade to the latest version using Magento Connect?

### Ans. Upgrading Magento to the latest version is a fairly simple task. Copy and Paste this key magento-core/Mage\_All\_Latest VIA Magento Connect where it states Paste extension key to install:. This will upgrade Magento to the newest version.

### Q 5. Explain about the Modules of Magento?

### Ans. Magento supports installation of modules through a web-based interface accessible through the administration area of a Magento installation. Modules are hosted on the Magento eCommerce website as a PEAR server. Any community member can upload a module through the website and is made available once confirmed by a member of the Magento team. Modules are installed by entering a module key, available on the module page, into the web based interface.

### There are three categories of modules hosted on Magento Connect:

### Core Modules

### Community Modules

### Commercial Modules

### Core and Community modules can be installed via the administration area. Commercial module pages provide price information and a link to an external website.

### Q 6. What technology used by Magento?

### Ans. Magento uses PHP as a web server scripting language and the MySQL Database. The data model is based on the Entity-attribute-value model that stores data objects in tree structures, thus allowing a change to a data structure without changing the database definition.

### Q 7. What is MVC structure in Magento?

### Ans. The Model-View-Controller (MVC) architecture traces its

### origins back to the Smalltalk Programming language and Xerox

### Parc. Since then, there have been many systems that describe

### their architecture as MVC. Each system is slightly

### different, but all have the goal of separating data access,

### business logic, and user-interface code from one another.

### Q 8. What is benefit of namespace (package) in magento?

### Ans. We can have more than one module with same name but they should be placed in different namespaces. All magento core modules are contained in mage namespace.

### core/Mage/Catalog

### and all custom modules are placed in

### local/CustomModule

### Q 9. How to include CMS block in template file(.phtml)?

### Ans. Access block’s content from .phtml template file by :

### echo $this->getLayout()->createBlock(‘cms/block’)->setBlockId(‘static\_block\_id’)->toHTML();

### Q 10. How to add an external javascript/css file to Magento?

### Ans.

### css/yourstyle.css

### or

### skin\_jsjs/ yourfile.js

### skin\_csscss/yourstyle. css

### Q 11. What are handles in magento (layout)?

### Ans. Handles are basically used for controlling the structure of the page like which block will be displayed and where. First level child elements of the node are called layout handles. Every page request can have several unique Handles. The handle is called for every page. handle for products belongs to virtual product type, PRODUCT\_TYPE\_simple is called for product details page of simple product type and PRODUCT\_TYPE\_virtual is called for the virtual product detail page and customer\_logged\_in handle is called only if customer is logged in. The muster\_index\_index handle is created by combining the frontName (muster), Action Controller (index), and Action Controller Action Method (index) into a single string and this handle will be called only when /zag/index/index url is accessed.

### Q 12. What is in magento?

### Ans. The routers tag allow us to decide frontname for each module. The tag is defined in config.xml file of module. For Namespace\_MyModule frontname is moduleurl so the url will be like :

### websiteurl.com/moduleurl/controllername/actionname

### standard

### Namespace\_MyModule

### moduleurl

### Q 13. Which factors affect performance of magento?

### Ans.

### 1. EAV structure of magento database, even for retrieving single entity the query becomes very complex .

### 2. Magento’s template system involves a lot of recursive rendering

### 3. Huge XML trees built up for layout configuration, application configuration settings

### Q 14. How to improve magento performance?

### Ans.

### Enabled magento caching

### MySQL Query caching

### Enable Gzip Compression

### Disable any unused modules

### Disable the Magento log

### Optimise your images

### Combine external CSS/JS into one file

### Enable Apache KeepAlives: Make sure your Apache configuration has KeepAlives enabled.

### Q 15. How to get the Total Price of items currently in the Cart?

### helper(‘checkout’)->formatPrice(Mage::getSingleton(‘checkout/cart’)->getQuote()->getGrandTotal()); ?>

### Q 16. How to set different themes for logged in users?

### if(Mage::getSingleton(‘customer/session’)->isLoggedIn()):

### Mage::getDesign()->setPackageName(‘package\_name’)->setTheme(‘themename’);

### endif;

### Q 17. How to create magento custom module?

### Ans. Steps to create custom magento module:

### Namespace : Zag

### Module Name : Mymodule

### 1. Create directory Mymodule in app/code/local/Zag

### 2. Create Block, controllers, etc, Module directories. Create controller, block and module file as required.

### 3. Create module configuration file (app/code/local/Zag/Mymodule/etc/config.xml).

### 4. Create xml file (app/etc/modules/Zag\_ Mymodule.xml)to enable/disable module and tell magento system from which code pool that module will be taken.

### Q 18. How to set different themes for each store?

### Ans. Go to : System>Designs

### Then, add new design change or edit existing. You can select Store and Custom Design.

### Q 19. How to make product’s custom attribute searchable in adavance search?

### Ans. Go to : Catalog > Attribues > Manage Attribues

### Edit the attribute and select “Yes” for Use in Advanced Search.

### Q 20. How to fetch 5 bestsellers products programmatically?

### Ans.

### Mage::getResourceModel(‘reports/product\_collection’)

### ->addOrderedQty()

### ->addAttributeToSelect(‘\*’)

### ->setPage(1, 5)

### ->load();

### 21-Explain Magento’s MVC architecture

### *First of all, what is MVC?*

### MVC stands for Model-View-Controller. Any application that separates it’s *data access, business logic*and *user interface* is called MVC. There can be two types of MVC: *convention-based* and*configuration-based*. Example, cakePHP is convention-based, i.e. you just need to follow the instructions of the core system to get your module ready in just few lines. Magento is configuration-based, i.e. you need to specify each and every thing to your module’s config file in order to get it work. Magento has Controller (for Routing), Block (for Business Logic), Model (for DB access, sql) and Template file (for Presentation i.e. View).

### *How Magento’s MVC works:*

### 1. When you enter the URL (something like http://mysite.com/frontname/controller/method/param1/value1/param2/value2), this URL is intercepted by one PHP file called index.php which instantiates Magento application

### 2. Magento application instantiates Front Controller object

### 3. Further, front controller instantiates Router objects (specified in module’s config.xml, global tag)

### 4. Now, Router is responsible to “match” the frontname which is in our URL

### 5. If “match” is found, it sees controller name and method name in the URL, which is finally called.

### 6. Now depending on what is written in action name (method name), it is executed. If any models are called in it, the controller method will instantiate that model and call the method in it which is requested.

### 7. Then the controller action (method) instantiate the Layout object, which calls Block specified for this action (method) name (Each controller action name have block and template file associated with it, which can be found at app/design/frontend or adminhtml/namespace/module/layout/module.xml file, name of layout file (module.xml) can be found in config.xml of that module, in layout updates tag).

### 8. Template file (.phtml) now calls the corresponding block for any method request. So, if you write $this->methodName in .phtml file, it will check “methodName” in the block file which is associated in module.xml file.

### 9. Block contains PHP logic. It references Models for any data from DB.

### 10. If either Block, Template file or Controller need to get/set some data from/to database, they can call Model directly like Mage::getModel(‘modulename/modelname’).

### For diagramatic view: [click here](http://alanstorm.com/2009/img/magento-book/magento-mvc.png) (courtsey: Alan Storm)

### 22 =How Magento ORM works?

### ORM stands for Object Relational Mapping. It’s a programming technique used to convert different types of data to Objects and vice versa.

### In Magento, ORM is shown as Model (based on Zend Framework’s Zend\_Db\_Adapter), which further breaks down to two types of Models.

### - First is the “simple” i.e. Regular Models which is nothing but flat table or our regular table structure. - Second Model is EAV (Entity Attribute Value), which is quite complicated and expensive to query.

### All Magento Models interacting with database are inherited from Mage\_Core\_Model\_Abstract class, which is further inherited from Varien\_Object.

### Difference between two Models is, Simple Model is inherited from*Mage\_Core\_Model\_Resource\_Db\_Abstract* class, while EAV is inherited from *Mage\_Eav\_Model\_Entity\_Abstract*.

### For those who don’t know what EAV is, please read my 3rd answer below.

### So, to end up this question, when you want to get some data in Magento, you call it like this:

### Mage::getModel('module/model')->load(1);

### where 1 is the primary key id for some Regular/Simple table, while in EAV so many tables are joined to fetch just single row of data.

### 23. What is EAV in Magento?

### EAV, stands for Entity Attribute Value, is a technique which allows you to add unlimited columns to your table virtually. Means, the fields which is represented in “column” way in a regular table, is represented in a “row” (records) way in EAV. In EAV, you have one table which holds all the “attribute” (table field names) data, and other tables which hold the “entity” (id or primary id) and value (value for that id) against each attribute.

### In Magento, there is one table to hold attribute values called *eav\_attribute* and 5-6 tables which holds entity and data in fully normalized form,

### - eav\_entity, eav\_entity\_int (for holding Integer values), - eav\_entity\_varchar (for holding Varchar values), - eav\_entity\_datetime (for holding Datetime values), - eav\_entity\_decimal (for holding Decimal/float values), - eav\_entity\_text (for holding text (mysql Text type) values).

### EAV is expensive and should only be used when you are not sure about number of fields in a table which can vary in future. To just get one single record, Magento joins 4-5 tables to get data in EAV. But this doesn’t mean that EAV only has drawbacks. The main advantage of EAV is when you may want to add table field in future, when there are thousands or millions of records already present in your table. In regular table, if you add table field with these amount of data, it will screw up your table, as for each empty row also some bytes will be allocated as per data type you select. While in EAV, adding the table column will not affect the previously saved records (also the extra space will not get allocated!) and all the new records will seamlessly have data in these columns without any problem.

### 24. Difference between Mage::getSingleton() and Mage::getModel()

### The difference between Mage:getSingleton() and Mage::getModel() is that the former one does not create an object if the object for same class is already created, while the later creates new objects every time for the class when it’s called.

### Mage::getSingleton() uses the “singleton design pattern” of PHP. If the object is not created, it will create it.

### Mage::getSingleton() is mostly used when you want to create an object once, modify it and later fetch from it. Popular example is session, you first create a session object, and then add/remove values from session across different pages, so that it retains your values (e.g. cart values, logged in customer details, etc.) and doesn’t create new session object losing your last changes.

### Mage::getModel() is used when you want to have the fresh data from the database. Example is when you want to show records from database.

1. **Question1. What Is Magento?**

**Answer :**

Magento is an open source E-commerce software, created by Varien which is useful for online business and it has the flexible modular architecture. It is scalable and it has many control options that helps the user. Magento uses E-commerce platform which offers companies ultimate E-commerce solutions and extensive support network.

1. **Question2. Why To Use Magento?**

**Answer :**

**The uses of Magento are:**

* + Magento is open source E-commerce software.
  + It is scalable and offers small companies to build business.
  + It provides the searching and sorting of products in several ways.
  + Easily integrates with many of the third-party sites which are needed to run effective E-commerce website.
  + Using this, customer can order or purchase number of products. There are no limits on number of purchasing products.

1. **Question3. List The Web-hosting Sites Of Magento?**

**Answer :**

**The Web-Hosting sites of Magento are:**

* + SiteGround
  + BlueHost
  + HostGator
  + Inmotion
  + Arvixe
  + site5

1. **Question4. What Are Disadvantages Of Magento?**

**Answer :**

**The disadvantages of Magento are:**

* + Magento uses larger disk space and memory.
  + It takes much time to build the customized functionality.
  + It is very slow compared to other E-commerce sites.
  + It needs proper hosting environment, if the hosting environment is improper the user can face the problems.

1. **Question5. Name The Web-server That Supports Magento?**

**Answer :**

**The Web-server that supports Magento are:**

* + Apache 2.x
  + Nginx 1.7.x

1. **Question6. What Are Magento Products?**

**Answer :**

Products are the items or things that are sold in Magento. Product can be anything that is capable of satisfying customer needs. This includes both physical products and services.

1. **Question7. Name The Product Types That Are Available In Magento?**

**Answer :**

**The product types available in Magento are:**

* + Simple Products
  + Grouped Products
  + Configurable Products
  + Virtual Products
  + Bundled Products
  + Downloadable Products

1. **Question8. What Is Inventory?**

**Answer :**

Inventory allows setting a product's stock quantity. For instance, you have a product with 100 units in stock. If you set the stock availability to "Out of Stock" then it will force the item to be out of stock.

1. **Question9. Name The Categories Of E-commerce?**

**Answer :**

**The categories of E-Commerce are:**

* + Business to Business(B2B)
  + Business to Consumer(B2C)
  + Consumer to Consumer(C2C)
  + Consumer to Business(C2B)

1. **Question10. What Does Rate Percent Mean In Manage Tax Rate Window?**

**Answer :**

Rate Percent specify the percent of the tax rate.

1. **Question11. What Does Priority Field Specifies In Manage Tax Rules?**

**Answer :**

Priority field specifies when the tax should be applied to other tax rules.

1. **Question12. What Is The Used Of Zero Subtotal Checkout Panel?**

**Answer :**

The Zero Subtotal Checkout panel is a payment option that displays when order total is zero and not required to enter payment details for the customer.

1. **Question13. What Is The Used Of 3d Secure Card Validation Field In Saved Cc?**

**Answer :**

It is additional security functionality where customer needs to provide credit card password to complete the purchase order.

1. **Question14. Which Are The Methods Of Paypal Payment Gateways?**

**Answer :**

**The two methods of PayPal Payment Gateways are:**

Payflow Pro (Includes Express Checkout)

Payflow Link (Includes Express Checkout)

1. **Question15. What Is Payflow Pro?**

**Answer :**

The Payflow Pro option is customizable payment gateway which can be used with merchant account to process credit card transactions.

1. **Question16. What Is Payflow Link?**

**Answer :**

Payflow Link option often called as hosted payment gateway that keeps customer on your site by providing fast and easy way to add transaction processing to your site.

1. **Question17. What Is The Use Of My Cart Link Panel?**

**Answer :**

My Cart Link panel specifies whether the number of quantities in the cart should be shown or whether the number of different products should be shown using the Display Cart Summary field.

1. **Question18. What Is Google Checkout In Magento?**

**Answer :**

Google Checkout is online payment processing service provided by Google. Magento allows integration of online stores with Google checkout. It is like PayPal that simplifies the process of paying for online purchases.

1. **Question19. What Is Magento Manage Order?**

**Answer :**

Order management is important thing which allows business to run smoothly and keeps customers happy, making them more likely to visit your site in the future.

1. **Question20. What Is Magento Google Analytics?**

**Answer :**

Google Analytics is a finest Google service for those who are actively managing websites and adds analytics to Magento store including Ecommerce tracking and conversions of their websites.

1. **Question21. What Is The Use Of Page Layout In Magento?**

**Answer :**

Layout files are useful in rendering front pages of Magento.

1. **Question22. What Is Magento Content Management System(cms)?**

**Answer :**

Magento CMS (Content Management System) section is used to manage all web site pages. It is a way of promoting the products by providing valuable information to the customers and increases visibility to search engines.

1. **Question23. What Are Static Blocks?**

**Answer :**

Static block is a piece of content can be used anywhere in the pages. Magento allows creating blocks of content that can be used through the store and can be added to any page or another block.

1. **Question24. What Are Polls?**

**Answer :**

Polls are used to get customer's opinions and preferences. The poll results appear immediately after response is submitted.

1. **Question25. How To Optimize The Magento Environment?**

**Answer :**

**Following points describe how to optimize the Magento environment:**

* + It uses complex database, so that it needs to be run on dedicated servers.
  + Magento application could be optimized by using cloud computing.
  + Merge you JavaScript and CSS files which reduces the load time dramatically since its loading only one merged file.
  + Proper MySQL configuration is one of the most important aspects in terms of performance.
  + Always upgrade to the latest Magento version allows to perform better.

1. **Question26. How To Optimize Magento Configuration?**

**Answer :**

**The following points specify how to optimize the magento configuration:**

* + To speed up Magento performance, don't run mysql and web server on the same machine.
  + Do not host files on your web server that you do not use.
  + Optimization of session storage.
  + Enabling Magento flat catalog. (Magento uses a complex and resource-intensive Entity Attribute Value [or EAV] based catalog). After initial catalog establishment, enabling the flat catalog can dramatically improve database querying time.
  + Identification and disabling of unused Magento modules.

1. **Question27. What Is The Process Of Code Optimization?**

**Answer :**

**The process of Code Optimization are:**

* + Removal of unused or unnecessary code processes.
  + To optimize Magento performance, JavaScript and CSS files need to be compressed and aggregated.
  + Conformance of all site images to optimal web image sizes.
  + Identification of bottlenecks(process that causes the entire process to slow down or stop) processes in both front-end and back-end.

1. **Question28. How To Improve The Performance Of Database?**

**Answer :**

**The following points describe how to improve the performance of database:**

* + Unused data must be cleaned up regularly for better performance.
  + Optimization of database queries.
  + Configuration of setting and limits of the database server (e.g. memory setting, query cache, sort buffer optimization).

1. **Question29. Which Is The Php Version Used For Magento?**

**Answer :**

PHP 5.4 +

1. **Question30. What Is Wsld?**

**Answer :**

It stands for Web Services Description Language. It is used for describing web services and how to access them.

1. **Question31. What Does Only X Left Threshold Means In Stock Option?**

**Answer :**

It is used to set threshold number. When the units of that product are drop to that number, it will display Only X left message on the product details page.

1. **Question32. What Is Magento Payment Gateway?**

**Answer :**

Payment gateway processes the credit card data securely between customer and merchant and also between merchant and the payment processor. It is like checkpoint that protects customers against attempting to gather personal and financial information from customers and also act as mediator between the merchant and sponsoring bank.

1. **Question33. What Is The Process Of Order Life Cycle In Magento?**

**Answer :**

Orders follow a standard life cycle process. When customer place product orders, it arrive in the administration interface with a pending status. When order is processed, the status of order changes according to current state in the processing workflow. Once the invoice is created for the order, the status changes from pending to processing status. Next it creates shipment for an order which changes the status from pending to complete status.

1. **Question34. Which Are The Two Sections Present In Design Section?**

**Answer :**

**The two sections present in Design section are:**

* + Page Layout
  + Custom Design

1. **Question35. What Does The Page Layout Section Contains?**

**Answer :**

The Page Layout section contains a Layout option which allows selecting layout as per your choice and Layout Update XML option inserts the XML code.

1. **Question36. What Is The Use Of Meta Data Section While Setup New Pages?**

**Answer :**

The Meta Data section contains Keywords and description of the page.

1. **Question37. How To Subscribe To Newsletters Using Magento?**

**Answer :**

Customer can subscribe to Newsletters using Magento. Customer can sign up for the Newsletter when he creates a new customer account which contains checkbox for signing up. For creating Newsletters you need to enable Newsletter option in your magento to make sure that customer has confirmed to receive Newsletter.

1. **Question38. How To Optimize The Magento Front-end Performance?**

**Answer :**

**The following points show how to optimize the Magento front-end performance:**

Use the latest version of php, so that you can perform front-end operation much better and faster. The newest released version may cause the errors, so carefully read the release notes and check out the new version.

Use the clean database to improve the performance of magento. The database logs need to be clear regularly. The database stores the automatically created logs to keep track of record session and interaction.

1. **Question39. What Is Grouped Product?**

**Answer :**

This is a group of simple products. In this type, you cannot specify a specific price for product; you can just specify the discount.

1. **Question40. What Is Configurable Products?**

**Answer :**

In this type, customer can select products according to their color and size before purchasing. Example: Cell phones obtained in different colors and sizes.

1. **Question41. What Are Bundled Products?**

**Answer :**

Bundled products are those products which cannot be sold separately and doesn't give any choice for end user.

1. **Question42. What Is The Use Of Backorder Field In Product Stock Option Panel?**

**Answer :**

If it is enabled, customer can buy products even if they are out of stock.

1. **Question43. What Are Tax Rules?**

**Answer :**

Tax rules are entities that combine product tax classes, customer tax classes and tax rates.

1. **Question44. What Is The Use Of Manage Store Section?**

**Answer :**

Manage Stores section, you will see website names, store names and Store View Name columns.

1. **Question45. What Is E-commerce?**

**Answer :**

E-commerce (Electronic Commerce) is a type of business that involves the commercial transaction or purchasing or selling of goods and services through electronic channels known as internet.

1. **Question46. What Are The Features Of Magento?**

**Answer :**

**The features of Magento are:**

* + Magento provides different payment methods such as credit cards, PayPal, cheques, money order, Google checkouts.
  + It provides shipping of products in one order to the multiple addresses.
  + Easy to manage the orders by using admin panel.
  + It filters the products and displays in grid or list format.

1. **Question47. What Are The Advantages Of Magento?**

**Answer :**

**The advantages of magento are:**

* + It is user friendly E-commerce software.
  + It is compatible with Smartphone's, tablets and other mobile devices.
  + It provides multiple payment options so every visitor can make payment based on their preferred payment gateway.
  + It has many extensions which supports for the development of an online store.

1. **Question48. What Database Does Magento Supports?**

**Answer :**

MySql Database

1. **Question49. Which Is The Mysql Version Used For Magento?**

**Answer :**

MySQL 5.1

1. **Question50. What Is Consumer To Business?**

**Answer :**

This transaction is between consumer or customer and business or companies where consumer makes a product that the company uses to complete business.

1. **Question51. Explain The Architecture Of Magento?**

**Answer :**

The architecture of Magento is a typical PHP MVC (Model-View-Controller) application where the entire controller will be in one folder and all the models in another. Files are grouped together and known as modules in Magento.

1. **Question52. What Are The Different Features Of Magento?**

**Answer :**

**Some of the basic features of Magento are:**

* + SEO Friendly
  + Google sitemap support
  + Reporting and analytics
  + Customer accounts
  + Order management
  + Site management
  + Payment
  + Marketing promotion and tools
  + International support
  + Extremely modular architecture

1. **Question53. What Is Eav In Magento?**

**Answer :**

EAV stands for Entity Attribute Value. It is a technique that facilitates users to add unlimited columns to their table virtually.

1. **Question54. What Are The Limitations Of Magento?**

**Answer :**

**There are three reasons to use UNITS in programming:**

* + Magento is written in PHP so it is comparatively slower in performance to other e-Commerce solutions.
  + Magento requires more space and memory. It can consume gigabytes of RAM during heavy processes.
  + It becomes complex if it is not using object-oriented programming.

1. **Question55. How Can You Enhance The Magento Performance?**

**Answer :**

The first Pascal standard was documented by the author of the Pascal programming language Niklaus Wirth but it was an unofficial Pascal standard.

* + Disable the Magento log
  + Disable any un-used modules
  + Magento Caching
  + Optimize your image
  + Optimize your Server
  + Use a Content Delivery Network (CDN)
  + Put Stylesheets at the Top
  + Put Scripts at the Bottom
  + Avoid CSS Expressions

1. **Question56. Explain How To Change The Magento Core Api Setting?**

**Answer :**

You have to follow these steps to change Magento core API setting.

* + Go to Admin menu, choose System -> Configuration
  + Select Magento Core API on the left side of the Configuration Panel, under Services
  + Click on to expand the General Settings section and you can
  + Type the name of the Default Response Charset that you want to use
  + Determine the Client Session Timeout in seconds
  + Click the Save Config button when complete

1. **Question57. Can All Billing Information Be Managed Through Magento?**

**Answer :**

**You can do the following things through the client Magento account:**

* + You can update your billing address.
  + You can add a credit card.
  + You can view your billing history.
  + You can add a PayPal account.
  + You can produce a print ready receipt.

1. **Question58. What Are The Advantages Of Applying Connect Patches In Magento?**

**Answer :**

**In Magento, applying Connect Patches provide the following features:**

* + Enable easy installation of packages with installation and overwrite any existing translations for the same time
  + Enhance security, by default Magento Connect uses HTTP to download extensions instead of FTP
  + Facilitate the extension developers to create new extensions with a dash character in the name
  + Magento administrators will be informed now who tries to install an extension with insufficient file system privileges.

1. **Question59. How Can You Make Magento More Secure For The Client?**

**Answer :**

**You can use the following instructions to make Magento more secure for the client:**

* + Use a strong password and change them at regular interval.
  + Disable remote access to Magento Connect Manager.
  + Disable Downloader on production sites.
  + Restrict access to safe IP addresses.

1. **Question60. How To Configure Magento To Work With Another Domain?**

**Answer :**

To configure Magento to work with another domain, you have to change the Magento base URL option in the admin area.

**Follow these steps:**

* + Go to Magento admin area > System > Configuration and click Web on the left menu.
  + Select the unsecure option
  + Edit the base URL field to change the URL that will be used for normal (HTTP) connections.

**1) Mention what is Magento?**

Magento is an e-commerce platform created on open source technology, which provides online merchants with an exceptional flexibility and control over the content, look and functionality of their e-commerce store.

**2) Mention what is the architecture of Magento? What are the different versions of Magento?**

Magento architecture is a typical PHP **MVC (Model-View-Controller)**application, where all the **Controllers** will be in one folder and all the**Models** in another, etc.  Based on their functionality files are grouped together, which are referred as modules in Magento.

Different version of Magento includes

* Magento Enterprise
* Magento .go
* Magento Community

**3) Mention what technology does Magento use?**

Magento use PHP as a web server scripting language and MySQL for database.

**4) Mention what is the difference between Mage::getModel() and Mage::getSingletone() in Magento?**

* **Mage::getModel():** It always creates a new object
* **Mage: :getSingleton():** It always look for an existing object and if not then creates a new object

**5) Mention what are the basic features of Magento?**

Basic features of Magento includes

* Reporting and Analytics
* Product and Catalog Browsing
* Customer Accounts
* Order Management
* Payment
* Site Management
* Shipping
* Search engine optimization
* Marketing promotions and tools
* Checkout
* International Support

**6) Mention what is the limitation of Magento?**

* Magento is supported by PHP, comparatively to other e-commerce solutions, Magento might be slow in performance
* It becomes a complex system if it is not using object-oriented programming
* Magento requires much space and memory

**7) Explain how you can enhance the Magento performance?**

To enhance the Magento performance

* Disable the Magento log
* Combine external CSS/JS into one file
* Disable any unused modules
* MySQL Query Caching
* Enable Magento caching
* Enable Gzip compression
* Optimize your image

**8) Explain how you can show a certain number of products for guests in Magento?**

In the toolbar block you will see

**app/code/core/Mage/Catalog/Block/Product/List/Toolbar.php**

there is a method:

**Public function setCollection($collection);**

Inside there is a piece of code:

**$limit= (int)$this->get Limit();**

**If ($limit) {**

**$this ->\_collection->setPageSize($limit);**

**}**

You have to change variable $limit; you should override that block in the local pool, not change directly in the core.  In order to see whether the customer is a guest, you can use this code

Mage:: getSingleton(‘customer/session’) **->** isLoggedIn()

**9) Mention what all billing information can be managed through Magento?**

From the client Magento account, you can do following things

* Update your billing address
* Add a credit card
* View your billing history
* Add a PayPal account
* Produce a print ready receipt

**10) Explain how you can change Magento Core API settings?**

To change Magento Core API settings, you have to

* Go to Admin menu, choose **System -> Configuration**
* Select Magento Core API on the left side of the **Configuration Panel**, under **Services**
* Tap on to expand the **General Settings** section and you can
* Type the name of the **Default Response Charset**that you want to use
* Determine the **Client Session Timeout** in seconds
* Click the **Save Config** button when complete

**11) Explain how Magento can be made more secure for the client?**

Best practices for Magento includes

* Using a strong password and changing them at regular interval
* Disable remote access to Magento Connect Manager
* Disable Downloader on production sites
* Restrict access to safe IP addresses

**12) Mention what is the benefit of applying Connect Patches in Magento?**

In Magento, applying connect patch

* It enables easy installation of packages with installation; it overwrites any existing translations for the same time
* For enhancing security, by default **Magento Connect** uses HTTP to download extensions instead of FTP
* With a dash character in the name, extension developers can now create extensions
* Magento administrators will be informed now who tries to install an extension with insufficient file system privileges

**13) Explain how you can move Magento to another Directory?**

To move Magento to other Directory you have to follow the following steps.

* Suppose you have Magento installed in the following location

http://www.guru99.com/store/

* On visiting your site, you want Magento to be the first thing to come up

http://www.guru99.com

* Let assume you have a directory structure like this

/home/username/public\_html/

* Which means Magento would be installed here

/home/username/public\_html/store/

* Login to the backend of the Magento first and go to

System **->** Configuration **->** Web

Update the Secure and Unsecure URL for your store and then link to your site via SSH and then go to the directory, where you will be shifting Magento

cd public\_html/

* Now, transfer all the files from the store directory to the directory you are in

mv store/\* store/.htaccess

* Delete the cache data

rm –vf var/cache/

Now Magento is moved to another directory.

**14) Explain how you can reset Magento file & Directory permissions?**

You can reset Magento file & Directory to their default and secure permissions, by following commands from the directory where Magento is installed

find . –type f –exec chmod 644 {} \;

find . –type d –exec chmod 755 {} \;

chmod +x mage

**15) Explain how you can configure Magento to work with another domain?**

To do that, in the admin area, you have to change the Magento Base URL option. To do this, visit to your Magento admin area> System > Configuration and click Web on the left menu. Select the **Unsecure option**after that edit the base URL field to change the URL that will be used for normal (HTTP) connections.

**Question: What is Magento?**  
Magento is an **e-commerce platform** created on open source technology, which provides online merchants with an exceptional flexibility. Magento is **CMS** which control content, look and functionality of their e-commerce store. It is one of the best CMS known for ecommerce website.  
  
  
**Question: What architecture is used by Magento?**  
MVC which means Model-View-Controller.  
  
  
**Question: What are the different edition of Magento?**

1. Magento Community Edition
2. Magento Enterprise Edition
3. Magento Professional Edition
4. Magento .go

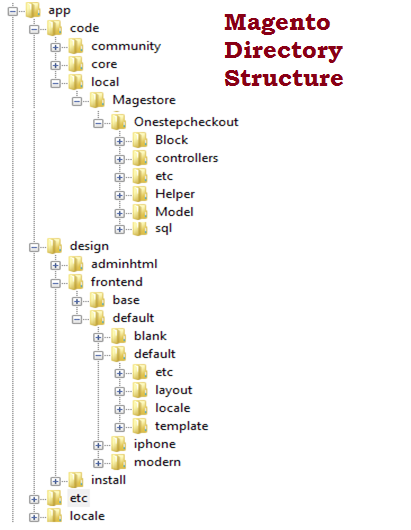
**Question: What are the different features of Magento?**

1. User Management
2. Customer Management
3. Product Management
4. Order Management
5. Payment Management
6. Site Management
7. Search engine optimization
8. International Support

**Question: How we can enhance the Magento performance?**

1. Disable the Magento log
2. Disable any un-used modules
3. Magento Caching
4. Enable Gzip compression
5. Optimize your image
6. Optimize your Server
7. Use a Content Delivery Network (CDN)
8. USE Gzip Components
9. Put Stylesheets at the Top (CSS Files in head tag)
10. Put Scripts at the Bottom (Js files in footer)
11. Avoid CSS Expressions (e.g 100/2)

Look: <http://www.web-technology-experts-notes.in/2013/10/14-steps-to-reduce-the-loading-time-of-website.html>  
  
  
**Question: Which technology does mangento use?**  
Zend Framework (PHP), MySQL/MySQLI, CSS, javaScript and HTML  
  
  
**Question:In Which language, mangento is written?**  
PHP  
  
  
**Question:What is initial Release date of magento?**  
March 31, 2008  
  
  
**Question:What is initial Release date of magento?**  
Version: 1.9.1.1 Dated May 1, 2015  
  
  
**Question: What type of web application we create in Magento?**  
Shopping Cart Software  
  
  
**Question: What is the difference between Mage::getSingletone() and Mage::getModel() in Magento?**  
Mage::getSingletone(): finds for an existing object if not then create that a newobject but Mage::getModel() always creates a new object.  
  
  
**Question: What is EAV in Magento?**  
Full form of EAV is Entity–attribute–value model.  
EAV is a data model to data model to describe entities.  
In EAV data are stored in different smaller tables rather than storing in a single table.  
**For Example**  
Product name is stored in catalog\_product\_entity\_varchar table.   
Product id is stored in catalog\_product\_entity\_int table.   
Product price is stored in catalog\_product\_entity\_decimal table.   
  
  
**Question: How does Magento ORM works?**  
ORM full form is Object Relational Mapping.  
ORM is a programming technique which is used to convert different types of data to Objects and vice versa  
. ORM is shown as Model (based on Zend Framework’s Zend\_Db\_Adapter), which further breaks down to two types of Models.  
a. simple  
b. EAV Model  
 **Question: What is folder/file structure of Magento?**

[](http://3.bp.blogspot.com/-97s-unzAu9I/VdWzqnCAkTI/AAAAAAAAAz4/Q3yh86Ox2Y0/s1600/magento%2Bstructure.png)

**Question: What are different Modules of Magento?**  
Core Modules   
Community Modules   
Commercial Modules   
 **Question:How to add an external javascript/css file in Magento? ?**  
**Add Css File**

<action method="addCss"><stylesheet>css/yourstyle.css</stylesheet></action>

**Add jS File**

<action method="addJs"><script>js/yourfile.js</script></action>

**Question: How to change the theme for login user?**

if(Mage::getSingleton('customer/session')-&gt;isLoggedIn()):

Mage::getDesign()-&gt;setPackageName('package\_name')-&gt;setTheme('themename');

endif;

**Question: How to run Custom Query in Magento ?**

$db = Mage::getSingleton('core/resource')-&gt;getConnection('core\_write');

$result=$db-&gt;query('SELECT \* FROM users where id=4');