

Exam1 Question

1. A protocol is _____ (rule for communication)
2. You accept services from an Access Service Provider and provide internet access to individual users. You are an _____ (Internet Server Provider)
3. You are using vim and are in normal mode. You're finished editing the file and realize you messed up royally. You want to exit vim without saving the changes. What keys (in order) will allow you to do this? _____ (:q!)
4. The ~ character is called _____ (tilde)
5. Write the command that will create an empty file named timing.doc _____
(touch timing.doc)
6. Write the command that allows for a user to have additional, more powerful commands at his/her disposal _____ (sudo)
7. Write the command that will remove a directory named stocks _____ (rmdir stocks)
8. A directory structure as used in Linux, Windows and other operating systems is called a _____ (tree)
9. Directories are used for what purpose? _____ (organize files)
10. Write the command that will create a hidden directory named Dancers _____
(mkdir .Dancers)
11. Write the command that will create a directory named Singers _____
(mkdir Singers)
12. What command uses SSH protocols to copy files from one computer to another _____ (scp)
13. What command does a Domain Name Server lookup? _____ (dig)
14. You want to lookup your IP information on a Windows computer. What is the proper command to use? _____ (ipconfig)
15. What command changes the permissions on a file? _____ (chmod)
16. What tool will produce a list of all packages installed on the system? _____ (dpkg)
17. What is the name of the Penguin? _____ (Tux)
18. Write the command to display the Dot Quad for time.com. _____ (dig time.com)
19. Using output redirection, you want to produce a listing of all files/folders in a long format display of information. The listing will show all hidden files and directions along with all permissions. The output file is to be called list.txt. Write the full command to achieve this goal. _____ (ls -al > list.txt)
20. What command will show the date and time _____ (date)
21. Write the command that will list all the files/hidden files/subdirectories/hiddensubdirectories in a directory but display to the screen only those lines with the text "Bashrc" (note - quotes are used for clarity - you will be searching for text in a string but not with double quotes). _____ (ls -al | grep Bashrc)
22. What command will take you absolutely to the root directory? _____ (cd /)

23. What is the full command that will produce a list of all Debian packages installed on the system? _____ (dpkg --get-selections or dpkg-query -l)
24. When using HTTP, who initiates a transfer request? _____ (client)
25. When using HTTP, who responds to a transfer request? _____ (server)
26. A _____ request is used to send data to the server, for example, customer information, file upload, etc. using HTML forms. (post)
27. What is a computer that hosts websites. _____ (web server)
28. What is a common program used as a web server? _____ (apache)
29. _____ is a web server written in Java and runs Java http servlets. (Tomcat)
30. What term means "data about data"? _____ (metadata)
31. _____ is a style sheet language used for describing the presentation of a document written in a markup language. (Cascading Style Sheets)
32. Using a tool to _____ HTML ensures you are meeting specifications. (validate)
33. In an HTML web page, we use tags to tell the browser what to do. What are the two tags to tell HTML where is the beginning and the end of the Head section of the page? Write them out fully and clearly, just as if you were entering the tags at a keyboard. _____
<HEAD> </head>
34. In a HTML web page, we use tags to tell the browser what to do. What are the two tags to tell HTML where is the beginning and the end of the title section of the page? Write them out fully and clearly, just as if you were entering the tags at a keyboard. _____
<title> </title>
35. In what section of a web page would include Javascript? _____ (head)
36. Search engines work by using programs _____ to visit a web page and extract all the references (links) from that page. (spiders)
37. Using _____ dramatically speeds up the entire page load process. (cache)
38. _____ is a set of Web development techniques using many Web technologies on the client side to create asynchronous Web applications. (AJAX)

Potential Exam Questions:

What command uses http program to retrieve data from remote server?

wget

What command uses SSH protocols to copy files from one computer to another

scp

What command does a Domain Name Server lookup?

dig <name>

What command tries to find the path to the remote server

traceroute <name>

You want to lookup your IP information on a Windows computer. What is the proper command to use?

ipconfig

You want to lookup your IP information on a Linux computer. What is the proper command to use?

ifconfig

What command changes the permissions on a file?

chmod

Linux sees everything as a **file**

What tool will produce a list of all packages installed on the system?

dpkg

The linux **which** command is used to find the location of a program.

What is the name of the Penguin?

Tux

Lab:

The **traceroute** command can show you the path a packet takes from one computer to another.

You want to find the Dot Quad for the time.com website. Write out the command

dig time.com

What command will list the path packets will take to connect your computer to the AKC.org website?

traceroute AKC.org

Using output redirection, you want to produce a listing of all files/folders in a long format display of information. The listing will show all hidden files and directories along with all permissions.

The output file is to be called out.txt. Write the full command to achieve this goal.

ls -al > out.txt

What command will show the date and time?

date

Add date to the out.txt file

date >> out.txt

Write out the command to display the contents of the file OutsideLogins.log

cat OutsideLogins.log

Write the command to display the Dot Quad for agoogleaday.com.

`dig agoogleaday.com`

Write the command that will list all the files/hidden files/subdirectories/hiddensubdirectories in a directory but display to the screen only those lines with the text "Bashrc" (note - quotes are used for clarity - you will be searching for text in a string but not with double quotes).

`ls -al | grep Bashrc`

You are in your home directory. You need to create a subdirectory named Textbooks. Write the command to do this.

`mkdir Textbooks`

What command will take you absolutely to the root directory?

`cd /`

What command will take you to your home directory?

`cd ~/`

What is the full command that will produce a list of all b packages installed on the system?

`dpkg --get-selections`

Assume that mysql is installed on a system. Which command will display the version number of mysql?

`mysql --version`

Write the command that will create a hidden directory named Special

`mkdir .Special`

Listing the files in the root (starting) directory

`ls /`

Purpose of Directories: `directories are used to help organize files`

A directory structure as used in Linux, Windows and other operating systems is called a `tree`

Write the command that will remove a directory named Walker

`rmdir Walker`

Write the command that will remove a file named Walker

`rm Walker`

Write the command that allows for a user to have additional, more powerful commands at his/her disposal.

`sudo`

Write the command that will create an empty file named Superman.txt

`touch Superman.txt`

The ~character is called the `tilde`

You would use the `;` to separate the commands/binaries

`date > out.txt ; traceroute justflipacoin.com >> out.txt ; date >> out.txt`

Your the present working directory

`pwd`

HTTP:

_____ http _____ is a generic protocol that transfers content.

_____http_____ consists of a request and a response message sent over a socket.

When using HTTP, who initiates a transfer request? _____Clients_____

When using HTTP, who responds to a transfer request? _____Server_____

The _____GET_____ method is used to retrieve information from the given server using a given URI. Requests using this method should only retrieve data and should have no other effect on the data.

A _____POST_____ request is used to send data to the server, for example, customer information, file upload, etc. using HTML forms.

HTTP Requests: Status Codes

- 1xx: Informational - It means the request has been received and the process is continuing.
- 2xx: Success - It means the action was successfully received, understood, and accepted.
- 3xx: Redirection - It means further action must be taken in order to complete the request.
- 4xx: Client Error - It means the request contains incorrect syntax or cannot be fulfilled.
- 5xx: Server Error - It means the server failed to fulfill an apparently valid request.

What is a computer that hosts websites. _____Web Server_____

What is a common program used as a web server? _____Apache_____

Name the language module that runs inside of Apache. _____PHP_____

_____Tomcat_____ is a web server written in Java and runs Java http servlets.

HTML - Hypertext Markup Language

What term means "data about data"? _____Contains Metadata_____

_____Cascading Style Sheets (CSS)_____ is a style sheet language used for describing the presentation of a document written in a markup language.

Using a tool to _____validate_____ HTML ensures you are meeting specifications.

In an HTML web page, we use tags to tell the browser what to do. What are the two tags to tell HTML where is the beginning and the end of the Head section of the page? Write them out fully and clearly, just as if you were entering the tags at a keyboard.

<HEAD> </head>

In a HTML web page, we use tags to tell the browser what to do. What are the two tags to tell HTML where is the beginning and the end of the Body section of the page? Write them out fully and clearly, just as if you were entering the tags at a keyboard.

<body> </body>

In a HTML web page, we use tags to tell the browser what to do. What are the two tags to tell HTML where is the beginning and the end of the title section of the page? Write them out fully and clearly, just as if you were entering the tags at a keyboard.

<title> </title>

In what section of a web page would include CSS? _____head_____

In what section of a web page would include Javascript? _____head_____

In what section of a web page would include the title? _____head_____

In what section of a web page would include content? _____body_____

Tags _____ENCLOSE_____ a set of information.

In a HTML web page, we use tags to tell the browser what to do. What are the two tags to tell HTML where is the beginning and the end of a paragraph? Write them out fully and clearly, just as if you were entering the tags at a keyboard.

<p> </p>

In a HTML web page, we use tags to tell the browser what to do. What are the two tags to tell HTML where is the beginning and the end of a part of the page that is to be boldface? Write them out fully and clearly, just as if you were entering the tags at a keyboard.

One of the things that make the World Wide Web is a collection of _____LINKS_____ to other documents.

The web is based on _____HYPERTEX_____, that is, text with built-in links to other data

In an HTML web page, we use tags to tell the browser what to do. What are the two tags to tell HTML where is the beginning and the end of a hyperlink? Write them out fully and clearly, just as if you were entering the tags at a keyboard.

<a linkinfo>

Search engines work by using programs (_____spiders_____) to visit a web page and extract all the references (links) from that page.

Links help define _____meaning_____

Using _____cache_____ dramatically speeds up the entire page load process.

_____Javascript_____ is an object-oriented computer programming language commonly used to create interactive effects within web browsers.

_____AJAX_____ is a set of Web development techniques using many Web technologies on the client side to create asynchronous Web applications.

Vim:

Exit editor discarding any changes

:q!

Exit editor and save any changes

:wq!

Two mode for vim

Normal mode and Editor mode

Make sure you are in the normal mode

Esc key

Insert text---Press i

Append text---press A

Delete an entire line---press dd

Undo a change---press u

Thanksgiving Exam Questions:

In HTML, JavaScript code must be inserted between _____ and _____ tags.

<script> </script>

A JavaScript _____ is a block of JavaScript code, that can be executed when "called" for. **Function**

_____ separate JavaScript statements. **Semicolons**

In JavaScript, the _____ symbol(s) means assignment. **=**

In JavaScript, the _____ symbol(s) means comparison of value. **==**

In JavaScript, the _____ symbol(s) means comparison of value and data type. **===**

_____ is JavaScript's default behavior of moving declarations to the top.

Hoisting

_____ is a format for storing and transporting data.

JSON

What does DOM stand for? Document Object Model

The HTML DOM model is constructed as a _____ of Objects. Tree

AJAX is a developer's dream, because you can _____ data from a web server - after the page has loaded. Read

AJAX is a developer's dream, because you can _____ a web page without reloading the page. Update

AJAX is a developer's dream, because you can _____ data to a web server - in the background. Send

The _____ object can be used to exchange data with a web server behind the scenes. XMLHttpRequest

JavaScript functions can also be looked at as _____. subroutines

There are well over _____ built in functions in PHP. 1000

With PHP, you can connect to and manipulate _____. databases

_____ is the most popular database system used with PHP. **MySQL**

The data in a MySQL database are stored in _____. **tables**

A _____ is a collection of related data, and it consists of columns and rows. **table**

A database _____ is a question or a request **query**

Another great thing about MySQL is that it can be _____ to support embedded database applications. **scaled down**