```
structural
:r1 define the structure of the document, eg: < h1 >
:r2 describe the content of the page (text, image ...)
:r3 determine the appearance of individual elements
:r4 do not exist
:r1 2 ok
:r2 0
:r3 0
:r4 0
Header
:r1 is given by tag <html>
:r2 Contains DTD directive
:r3 Contains metadata (encoding, title, author, cascading styles ...)
:r4 Contains the <body> tag and includes page text
:r1 0
:r2 0
:r3 2 ok
:r4 0
HTML editor of WISIWYG type
:r1 requires the user to know the language of the language
:r2 allows the user to fold a page without knowledge of HTML
:r3 is a text editor that adds text coloring, tag help
:r4 works exclusively with the text format of HTML page
:r1 0
:r2 2 ok
:r3 0
:r4 0
```

```
:r1 is used to edit the appearance of the text
:r2 are for header formatting
:r3 describe the nature of the element content
:r4 determine the document structure (define the headings and paragraph)
:r1 2 ok
:r2 0
:r3 0
:r4 0
CSS
:r1 is the language for writing a Web page
:r2 is the language for programming web applications
:r3 is the query language for database systems.
:r4 is the language to describe the way elements are displayed on pages written in HTML, XHTML or
XML
:r1 0
:r2 0
:r4 2 ok
It is possible to write CSS to the page code
:r1 only using the <style> element, another way is not possible
:r2 using the <style> element, either as an inline entry or using a declaration, or using the <link>
element with a reference to an external file
:r3 only by using <link> with reference to an external file
:r4 using database queries only
:r1 0
:r2 2 ok
:r3 0
:r4 0
Marking !important
```

Tags <b&gt;, &lt;i&gt;, &lt;strong&gt;

:r1 indicates an important part of the code, serves as a highlighted comment
:r2 does nothing, it is not part of the CSS definition
:r3 will increase the force of the declaration, preferring a weaker declaration before the stronger
:r4 is used to highlight text on a web page
:r1 0
:r2 0
:r3 2 ok
:r4 0
CSS allows
:r1 vs. HTML less options to format page layout
:r2 separation of structure and content, where HTML is defined appearance and in CSS then content
:r3 format any XML language
:r4 format HTML pages only
:r1 0
:r2 0
:r3 2 ok
:r4 0
CSS 2 introduced selectors where
:r1 * is a universal selector, A-B descendant selector, A+B parent and offspring, A/B sibling selector
:r2 * is universal selector, A>B descendant selector, A+B sibling selector
:r3 is a universal selector, A*B descendant selector, A\B parent and offspring
:r4 is universal selector, A*B descendant selector, A\B parent and offspring, A-B sibling selector
:r1 0
:r2 2 ok
:r3 0
:r4 0
CSS 2 also introduces pseudo-classes and pseudo-elements. Pseudoelement : first-line
:r1 allows you to format the first line

:r2 allows you to format the first column
:r3 allows you to format the first character
:r4 allows you to format the first paragraph
:r1 2 ok
:r2 0
:r3 0
:r4 0
<del></del>
CSS 2 defines pseudo-class links 
(do not consider the space between the colon and the identifier)
:r1 Unvisited link : before, Visited link : after, Focused link : first, Link under mouse pointer : under, Active link : activated
:r2 Unvisited link : first-link, Visited link : after, Focused link : here, Link under mouse pointer : down, Active link : active
:r3 Unvisited link : focus, Visited link : link, Focused link : focus, Link under mouse pointer : active, Active link : hover
:r4 Unvisited link : link, Visited link : visited, Focused link : focus, Link under mouse pointer : hover, Active link : active
:r1 0
:r2 0
:r3 0
:r4 2 ok
CSS 3
:r1 does not support animation, transparency (opacity), and does not support rounded corners on block elements
:r2 as the first standard defines word colors and introduces length units
:r3 is associated with HTML5 and exploits its features
:r4 prohibits 2D and 3D transformations and drag'n'drop methods
:r1 0
:r2 0
:r3 2 ok
:r4 0

JavaScript is :r1 programming (scripting) language for creating stand-alone applications :r2 language for creating server scripts :r3 another name for the JAVA programming language :r4 language for creating client scripts, or used as a built-in scripting language :r1 0 :r2 0 :r4 2 ok JavaScript :r1 unlike JAVA, does not support objects :r2 has a syntax similar to JAVA and C, is case sensitive :r3 can be used to create standalone executable applications :r4 is web-only, can not be used as a built-in scripting language :r1 0 :r2 2 ok :r3 0 :r4 0 JavaScript :r1 like PHP can be connected to HTML using the tag < script >as an external file or directly into the HTML stream or you can use in-line script :r2 must always be located in an external file and can not be pasted directly into HTML :r3 does not work with HTML at all :r4 can only be written to the HTML stream and can be in an external file by using inline writing :r1 2 ok :r2 0 :r3 0 :r4 0

Among the disadvantages of JavaScript include: :r1 Inability to work with objects :r2 the user can disable JavaScript, JavaScript can not access files other than cookies :r3 can not disable it, has unlimited access to any files (it is dangerous) :r4 There is only one version in all browsers that is not updating :r1 0 :r2 2 ok :r3 0 :r4 0 We have objects in the class of people(). This class has the method greeting(). Calling the method greeting to a object people looks like: :r1 people.greeting() :r2 greeting().poeple() :r3 people(greeting()) :r4 greeting(people()) :r1 2 ok :r2 0 :r3 0 :r4 0 Javascript has access :r1 to any object :r2 only to the browser window objects :r3 only to Math, Date, and String objects that they create :r4 to browser window objects, page elements, Math, Date, String, and created objects :r1 0 :r2 0 :r3 0 :r4 2 ok

## **Object Window** :r1 is the lowest in the hierarchy of objects :r2 is the top of the object hierarchy :r3 does not exist :r4 is inaccessible and can not work with it :r1 0 :r2 2 ok :r3 0 :r4 0 Date objects :r1 serves only for work with date :r2 serves only for work with time :r3 can be used, for example, for creating a calendar or timer, working with date and time :r4 serves to work with higher math :r1 0 :r3 2 ok :r4 0 XML (eXtensible Markup Language) :r1 is the language that serves to exchange information, its effectiveness depends on the structure :r2 is the language to indicate the information or program code, the so-called markup language, :r3 is an effective format for storing information, but can not be easily converted to other formats, man is unreadable :r4 has no standards and is not internationally supported :r1 2 ok :r2 0 :r3 0 :r4 0

XML document

```
:r1 always contains at least two root elements
:r2 always contains just one root element
:r3 is used to write only numeric values
:r4 can not be used to store information
:r1 0
:r2 2 ok
:r3 0
:r4 0
JSON - JavaScript Object Notation
:r1 is a way to write JavaScript
:r2 is the programming language for creating JAVA applications
:r3 is a lightweight format for data exchange
:r4 is used to implement the database
:r1 0
:r2 0
:r3 2 ok
:r4 0
JSON
:r1 is used to compress data
:r2 is unreadable to humans, the compiler needs to extract information
:r3 is used to store only image information
:r4 is a text-based, completely independent format for data exchange
:r1 0
:r2 0
:r3 0
:r4 2 ok
Web server
:r1 is the computer where the web pages are displayed
```

:r2 is a computer or computer program responsible for handling HTTP(S) requests from clients
:r3 is a computer that translates the text URL of a Web page to a number and redirects the request to the correct location
:r4 is a program used to create HTML pages
:r1 0
:r2 2 ok
:r3 0
:r4 0
НТТР
:r1 is used to exchange hypertext documents in HTML format
:r2 is used to create HTML pages and documents
:r3 allows secure data transfer and supports encryption
:r4 protocol describing the method of transmission of video data and video signals
:r1 2 ok
:r2 0
:r3 0
:r4 0
The source of information for the server can be:
:r1 only static content (prepared HTML pages that can not be changed)
:r2 only dynamic content (always generated based on request, some data base is needed to get the necessary data)
:r3 static (prepared) and dynamic (generated based on client requests) content
:r4 only audio or video signal
:r1 0
:r2 0
:r3 2 ok
:r4 0
HTTPS
:r1 is a protocol that allows secure communication in a computer network

:r2 is the file exchange protocol
:r3 does not allow encryption
:r4 Data transmitted by HTTPS is visible to everyone
:r1 2 ok
:r2 0
:r3 0
:r4 0
Apache HTTP server
:r1 is the computer through which all HTTP requests go
:r2 is a server software that does not support a programming language other than HTML and CSS
:r3 is a software web server with support for many features and languages
:r4 is a search engine for websites
:r1 0
:r2 0
:r3 2 ok
:r4 0
IIS (Internet Information Service)
:r1 is an information exchange service
:r2 is the Microsoft software server created for Windows
:r3 is a Microsoft physical server for collecting user information (access is prohibited)
:r4 is a server dedicated to file sharing, just like FTP
:r1 0
:r2 2 ok
:r3 0
:r4 0
NGINX
:r1 is a physical server processing the video transfer requirements
:r2 is a software web server that is very demanding and low in performance

:r3 is a Chinese social network
:r4 is a software web server with load managment and reverse proxy
:r1 0
:r2 0
:r3 0
:r4 2 ok
NGINX
:r1 is a software web server focused primarily on high performance and low memory demands
:r2 does not allow to set the connection limit from one IP address, so it can not prevent overloading
:r3 does not support modules, it can not be easily expanded
:r4 does not support HTTP and HTTPS protocol, it only serves to exchange files
:r1 2 ok
:r2 0
:r3 0
:r4 0
PHP
:r1 is a scripting language designed exclusively for Windows
:r2 is a platform-independent scripting language designed primarily for programming dynamic web sites and web applications
:r3 is a scripting language that can not be used to create larger applications
:r4 is a client scripting language, commands are done on the client side and the application does not burden the server
:r1 0
:r2 2 ok
:r3 0
:r4 0
PHP
:r1 for its incompatibility with different operating systems is used only marginally

:r2 thanks to many libraries and access to databases is one of the most widely used scripting languages for the web
:r3 only supports HTTP and FTP protocol
:r4 does not allow access to databases in any way
:r1 0
:r2 2 ok
:r3 0
:r4 0
Variables in PHP
:r1 The data type of the variable is always bound to a specific variable, the casting can only be performed using the functions
:r2 Once a created variable can not be deleted, it can only be overwritten. Deleting occurs only after the script has finished.
:r3 The data type of the variable is bound to the value not the variable
:r4 are string or math types only
:r1 0
:r2 0
:r3 2 ok
:r4 0
PHP
:r1 is specialized for a website and has broad suppurt in web hosting services
:r2 is primarily designed to create stand-alone applications similar to C language
:r3 does not support object-oriented programming
:r4 requires special scripting software
:r1 2 ok
:r2 0
:r3 0
:r4 0

The following character is used to separate instructions:

```
:r1 star *
:r2 semicolon;
:r3 colon:
:r4 hash #
:r1 0
:r2 2 ok
:r3 0
:r4 0
OOP in PHP
:r1 Although PHP supports objects, it does not allow inheritance
:r2 PHP has only private methods (functions)
:r3 PHP allows you to enter and change undeclared attributes
:r4 PHP does not support OOP
:r1 0
:r2 0
:r3 2 ok
:r4 0
Array types in PHP
:r1 PHP allows you to create only indexed arrays
:r2 PHP does not support multidimensional arrays
:r3 You can use indexed, associative and multidimensional arrays in PHP
:r4 Only text and numeric variables can be inserted into PHP arrays, not objects
:r1 0
:r2 0
:r3 2 ok
:r4 0
```

Variables in PHP

:r1 The name of each variable starts with a dollar sign (\$), a character equal to (=) is used to assign a value.
:r2 the name of each variable starts with an asterisk (*), the double-equal character (==) is used to assign the value
:r3 The variable name must not contain digits and underscore
:r4 The variable names are not case-sensitive
:r1 2 ok
:r2 0
:r3 0
:r4 0
Which of the follows is not a database objects
:r1 TABLE
:r2 TRIGGER
:r3 ROLLBACK
:r4 VIEW
:r1 0
:r2 0
:r3 2 ok
:r4 0
Which of the follows is not SQL Command for DML (Data Manipulation Language)
:r1 CREATE
:r2 SELECT
:r3 MERGE
:r4 SHOW
:r1 2 ok
:r2 0
:r3 0
:r4 0

Which of the follows is not SQL statements for DDL (Data Definition Language):

:r1 START TRANSACTION
:r2 CREATE
:r3 ALTER
:r4 DROP
:r1 2 ok
:r2 0
:r3 0
:r4 0
The SQL commands for Data Control Language (DCL) do not include:
:r1 GRANT
:r2 DELETE
:r3 ROLLBACK
:r4 REVOKE
:r1 0
:r2 2 ok
:r3 0
:r4 0
DOM (Document Object Model)
:r1 treats each HTML element as an object
:r2 is the way to create a text document
:r3 has no meaning, it's just the theoretical model of document structure description
:r4 Each element of an HTML document is written to a database and is accessible through SQL commands
:r1 2 ok
:r2 0
:r3 0
:r4 0
- <del>-</del>
In the DOM

:r1 Each object has certain properties - attributes, but can not respond to events
:r2 each object must be identified by an ID or a name
:r3 has each object properties-attributes, it can react on events, but not need be identified
:r4 there are no objects
:r1 0
:r2 2 ok
:r3 0
:r4 0
DOM
:r1 can be used to efficiently create dynamic tables and dynamically modify formatting using CSS
:r2 can not be used to dynamically create new objects in an HTML document, it is only possible to change their values
:r3 can only be used to edit HTML, not CSS and other files
:r4 The individual elements (objects) are served by PHP and SQL
:r1 2 ok
:r2 0
:r3 0
:r4 0
<del>-</del> -
DOM
:r1 can not be used to access XML documents
:r2 is the application interface defining the general standard for accessing any valid HTML or properly structured XML document
:r3 is dependent on the programming language
:r4 defines standards for creating HTML documents
:r1 0
:r2 2 ok
:r3 0
:r4 0