

# jeforthVM -- the javascript eforth VM

<https://github.com/samsuanchen/multitaskjavascripteforth/>

**jeForthVM.js** is a javascript source code running as a **multi task jeforth VM** with initially three jeforth words '**root**', '**code**', and '**dbg**' on web client or server html pages. This VM could be involved by `<script src= "./jeForthVM.js"> </script>`. Please check demos: **jefvm0.html**, **jefvm1.htm1**, or **movingEffect.htm**. A node.js (or node-webkit) server program could involve this VM, via `require( "./jeForthVM.js")`. Please check demos: **jefvm0.bat**, **jefvm1.bat**, or **jefvm2run.bat**.

## The word 'root'

This is a primitive root **vocabulary** having three jeforth word words '**root**', '**code**', and '**dbg**' initially. Please check topic 06 **vocTest** (using UP/DOWN key to select topic) in **jefvm1.htm1** to see how a **new vocabulary/word** could be defined, and how an **appropriate vocabulary/word** among vocabularies could be selected and be used properly.

## The word 'code'

This jeforth word could be used to define a **new jeforth words** by assigning a java script anonymous function to the new word. In **jefvm1.htm1**, a lot of new jeforth words defined as demos in topics **default**, **basic01**, **vocTest**, and **multiTask**. Also, this jeforth word could be used to define **new js functions** in order to be called by jeforth words. Please check topic 05 **jsFunctionTest** in **jefvm1.html**.

## The word 'dbg'

This jeforth word is used to easy trace or debug a defined jeforth word. Setting breakpoint in **jeForthVM.js** at **BP0**, of its corresponding javascript function, could halt the VM if **dbg** alone (having no any following word) is being executed. Otherwise, for example, **dbg xyz**, the following word **xyz** will be put into debugged list so that setting breakpoint **BP1** in **jeForthVM.js** could halt the VM if any word in the list is being executed.

## jefvm0.html

This is a web client html page used as a simple demonstration showing how to involve this javascript eforth VM via `<script src= "./jeForthVM.js"> </script>`.

## jefvm0.bat

Double click this batch command file will start a node-webkit web server (local host) html page showing how to involve this javascript eforth VM via `require( "./jeForthVM.js")`.

## jefvm1.html

This is a web client html page with local storage used as a demonstration showing how to involve, test, and debug **jeForthVM.js**.

## jefvm1.bat

Double click this batch command file will start a node-webkit web server (local host) html page with local storage used as a demonstration showing how to involve, test, and debug **jeForthVM.js**.

### 01. topics

showing all the topics

### 02. default

showing how to define new jeforth words

### 03. basic01

showing how to define a few basic jeforth words

## 04. basic02

showing how to test the basic jeforth words just defined

## 05. jsFunctionTest

showing how to define a java script function to be used in jeforth words

## 06. vocTest

showing how to define and use jeforth words in vocabularies

## 07. multiTask

showing how to define jeforth words for multi tasking

## 08. multiTask1

showing how to start multi tasks

## jefvm2run.bat

Double click this batch command file will start a process running 'node jefvm2.js' with file system I/O as yet another demonstration showing how to involve and test jeForthVM.js.

## multiTaskJavascriptEforthOutput.html

showing multi tasking demonstration log output.

## specialEffect.htm

another web client html page multi tasking demonstration of special effect moving objects.

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