REPL stands for Read Eval Print Loop and it represents a computer environment like a Windows console or Unix/Linux shell where a command is entered and the system responds with an output in an interactive mode. Node.js or **Node** comes bundled with a REPL environment. It performs the following tasks −

* **Read** − Reads user's input, parses the input into JavaScript data-structure, and stores in memory.
* **Eval** − Takes and evaluates the data structure.
* **Print** − Prints the result.
* **Loop** − Loops the above command until the user presses **ctrl-c** twice.

The REPL feature of Node is very useful in experimenting with Node.js codes and to debug JavaScript codes.

Starting REPL

REPL can be started by simply running **node** on shell/console without any arguments as follows.

$ node

You will see the REPL Command prompt > where you can type any Node.js command −

$ node

>

Simple Expression

Let's try a simple mathematics at the Node.js REPL command prompt −

$ node

> 1 + 3

4

> 1 + ( 2 \* 3 ) - 4

3

>

Use Variables

You can make use variables to store values and print later like any conventional script. If **var** keyword is not used, then the value is stored in the variable and printed. Whereas if **var** keyword is used, then the value is stored but not printed. You can print variables using **console.log()**.

$ node

> x = 10

10

> var y = 10

undefined

> x + y

20

> console.log("Hello World")

Hello World

undefined

Multiline Expression

Node REPL supports multiline expression similar to JavaScript. Let's check the following do-while loop in action −

$ node

> var x = 0

undefined

> do {

... x++;

... console.log("x: " + x);

... }

while ( x < 5 );

x: 1

x: 2

x: 3

x: 4

x: 5

undefined

>

**...** comes automatically when you press Enter after the opening bracket. Node automatically checks the continuity of expressions.

Underscore Variable

You can use underscore **(\_)** to get the last result −

$ node

> var x = 10

undefined

> var y = 20

undefined

> x + y

30

> var sum = \_

undefined

> console.log(sum)

30

undefined

>

REPL Commands

* **ctrl + c** − terminate the current command.
* **ctrl + c twice** − terminate the Node REPL.
* **ctrl + d** − terminate the Node REPL.
* **Up/Down Keys** − see command history and modify previous commands.
* **tab Keys** − list of current commands.
* **.help** − list of all commands.
* **.break** − exit from multiline expression.
* **.clear** − exit from multiline expression.
* **.save *filename*** − save the current Node REPL session to a file.
* **.load *filename*** − load file content in current Node REPL session.

Stopping REPL

As mentioned above, you will need to use **ctrl-c twice** to come out of Node.js REPL.

$ node

>

(^C again to quit)

>