



INTERACTIVE STACK

Server.js

```
/*
 * Interactive Stack in JavaScript.
 * Rajesh Patkar Institute Of Software Engineering.
 * copyright © Rajesh Patkar, All rights reserved.
 */
var rpise = {};
rpise.rl = require('readline');
rpise.console = rpise.rl.createInterface(process.stdin,
process.stdout,
    function (sub) {
        return [['push', 'pop', 'print', 'quit'], sub];
    }
);
rpise.stack = {
    stk: new Array(10),
    sp: 10,
    push: function (v) {
        if (this.sp == 0) {
            console.log("Overflow");
            throw "Overflow";
        }
        else {
            this.sp = this.sp - 1;
            this.stk[this.sp] = v;
        }
    },
    pop: function () {
        if (this.sp == 10) {
            console.log("Underflow");
        }
    }
};
```




```
        throw "Underflow";
    }
    else {
        this.sp = this.sp + 1;
        return this.stk[this.sp - 1];
    }
},
print: function () {
    console.log("Printing Stack");
    for (var i = this.sp; i < 10; i++) {
        console.log(this.stk[i]);
    }
}
};


rpise.controller = function (input) {
    switch (input) {
        case 'push':
            rpise.console.removeAllListeners("line");
            rpise.console.on("line",
                function pushController(value) {
                    try {
                        rpise.stack.push(value);
                        console.log("Thankyou for the input");
                    } catch (e) {
                        console.log("Sorry stack is full" +
                            ".. pop to create space in stack");
                    } finally {
                        rpise.mainPrompt();
                    }
                }
            );
            rpise.commandPrompt('push>');
            console.log("Enter the value to be pushed");
            break;
        case 'pop':
            try {
                console.log("the Last value popped is " +
                    rpise.stack.pop());
            } catch (e) {
                console.log("Stack is empty");
            }
            break;
    }
}
```

```
se.stack.pop();
    }
    catch (e) {
        console.log("Stack Empty value cannot be
popped");
    }
    finally {
        rpise.mainPrompt();
    }
    break;
case 'print':
    rpise.stack.print();
    rpise.mainPrompt();
    break;
case 'quit':
    rpise.console.close();
    process.stdin.destroy();
    break;
default:
    console.log("Please enter proper command [tab for
help]\n");
    break;
}
}
rpise.mainPrompt = function () {
    rpise.console.removeAllListeners("line");
    rpise.console.on("line", rpise.controller);
    rpise.console.setPrompt("rpise stack>", 12);
    rpise.console.prompt();
}
rpise.commandPrompt = function commandPrompt(command) {
    rpise.console.setPrompt(command, 6);
    rpise.console.prompt();
}

rpise.boot = function () {
    console.log("\nWelcome to RPISE Stack [press tab for
help]\n");
    rpise.console.close = function () {
```



```
console.log("\nThank your for using RPISE Stack ... \n");  
}  
rpise.mainPrompt();  
}  
rpise.boot();
```



Add : 25, Patel Shopping Center, Sai Nath Road, Malad (west) ,Opp malad subway , Mumbai 64 Contact : 9820396074, 022-28809398, 9820860292
Copyright © 2011-2020 Rajesh Patkar, All rights reserved.

