**HTTP module**

**Task 1:**

var h=require("http");

var server=h.createServer(

function(req,res)

{

if(req.url=="/")

{

res.writeHead(200,{"content-type":"text/html"});

res.write("<b> Home page </b>");

res.end();

}

else if(req.url=="/student")

{

res.writeHead(200,{"content-type":"text/plain"});

res.write("<i> Home page1 </i>");

res.end();

}

else

{

res.writeHead(404,{"content-type":"text/html"});

res.write("<h1> Page Not found </h1>");

res.end("Thanks");

res.write("Bye");

}

}

);

server.listen(5001);

console.log("Thanks for run");

**Task2:**

var http=require("http");

var server=http.createServer(

function(req,res)

{

if(req.url=="/")

{

const a={"Name":"ABC", "Age":35};

res.writeHead(200,

{"content-type":"application/json"

});

res.write("Thank you..!");

res.write(JSON.stringify(a));

res.end();

}

});

server.listen(6008);

**Write a nodejs program load a simple html file defined as static on nodejs web server and print its content as html content.**

var h=require("http");

var ps=require("fs");

var u=require("url");

var addr="http://localhost:6051/7.html";

var q=u.parse(addr,true);

data=ps.readFileSync("."+q.pathname);

var server=h.createServer(

function(req,res)

{

res.writeHead(200,{"content-type":"text/html"});

//res.writeHead(200,{"content-type":"text/plain"}); gives content of file(Whole program will display in port)

res.write(data);

res.end();

});

server.listen(6051);

**Write a nodejs program load a simple html file on nodejs web server and print its content as html content.**

var h=require("http");

var ps=require("fs");

var u=require("url");

var server=h.createServer(

function(req,res)

{

var q=u.parse(req.url,true);

data=ps.readFileSync("."+q.pathname);

res.writeHead(200,{"content-type":"text/html"}); //text/plain gives program

res.write(data);

console.log(data);

res.write("<h1> hello</h1>")

res.end()

});

server.listen(6005);

console.log("Server Started");

**Create own module:**

**Modules are the collection of JavaScript codes in a separate logical file that can be used in external applications on the basis of their related functionality. Modules are popular as they are easy to use and reusable. To create a module in Node.js, you will need the exports keyword. This keyword tells Node.js that the function can be used outside the module.**

**Syntax:**

exports.function\_name = function(arg1, arg2, ....argN) {

// function body

};

***Method 1***

**In 29.js file:**

const add=(a,b)=>

{

return(a+b);

}

module.exports=add;

**In another file:**

var d=require("./29.js");

console.log(d(10,15));

***Method 2***

**In 29.js file:**

const sub=(a,b)=>

{

return(a-b);

}

const mul=(a,b)=>

{

return(a\*b);

}

module.exports.s=sub;

module.exports.m=mul;

**In another file:**

var d1=require("./29.js");

console.log(d1.s(10,5));

console.log(d1.m(10,15));

***Method 3***

**In 29.js file:**

const sub=(a,b)=>

{

return(a-b);

}

const mul=(a,b)=>

{

return(a\*b);

}

module.exports.d2=sub;

module.exports.e2=mul;

**In another file:**

var {d2,e2}=require("./29.js");

console.log(d2(10,7));

console.log(e2(10,12));

***Method 4***

**In 29.js file:**

const sub=(a,b)=>

{

return(a-b);

}

const mul=(a,b)=>

{

return(a\*b);

}

const name="Hello"

module.exports={sub,mul,name};

**In another file:**

var {sub,mul,name}=require("./29.js");

console.log(sub(100,20));

console.log(mul(10,2));

console.log(name)

**Write a nodejs script to create my own module to calculate reverse of a given . That module should be used to compute all numbers between 1 to 100 in which square of reverse and reverse of square is same. These has call of reverse twice so call it from module.**

**In 31.js file**

function reversenum(num)

{

let rev=0;

while(num>0)

{

rev=rev\*10+(num%10);

num=parseInt(num/10);

}

return rev;

}

function square(num1)

{

return num1\*num1;

}

function checknum(num2)

{

a=square(num2);

b=square(reversenum(num2));

if(a==reversenum(b))

{

console.log("Number is equal")

}

else

{

console.log("Number is not equal")

}

}

module.exports.reversenum=reversenum;

module.exports.square=square;

module.exports.checknum=checknum;

**In another file:**

var d=require("./18.js");

d.checknum(12);

**Output:**

Number is equal

**Write a node.js script to create calculator using external module having a function add(), sub(), mul(), div(). This function returns result of calculation. Write all necessary .js files.**

**1.js**

**exports.add = function (x, y) {**

**return x + y;**

**};**

**exports.sub = function (x, y) {**

**return x - y;**

**};**

**exports.mult = function (x, y) {**

**return x \* y;**

**};**

**exports.div = function (x, y) {**

**return x / y;**

**};**

**2.js**

**const calculator = require('./calc');**

**let x = 50, y = 20;**

**console.log("Addition of 50 and 20 is "**

**+ calculator.add(x, y));**

**console.log("Subtraction of 50 and 20 is "**

**+ calculator.sub(x, y));**

**console.log("Multiplication of 50 and 20 is "**

**+ calculator.mult(x, y));**

**console.log("Division of 50 and 20 is "**

**+ calculator.div(x, y));**