**Practical No.1**

**Create an application to demonstrate Node.js Modules**

1. **Write a node.js program to demonstrate the concept of Local Modules.**

**modlib.js**

function Addition(a,b){

return a+b;

}

function subtraction(a,b){

return a-b;

}

var str ="hello";

module.exports ={Addition, subtraction,str};

**main.js**

const lib= require('./modlib');

const add = lib.Addition(2,3);

console.log("Addition is "+add);

const sub = lib.subtraction(7,9);

console.log("Subtraction is "+sub);

console.log(lib.str);

**Second way of Export**

**modlib.js**

module.exports ={

Addition: function(a,b){

     return a+b;

},

subtraction: function(a,b){

     return a-b;

},

str: "Hello"

};

//No change required in main.js

**Third way of export**

module.exports.Addition = function(a,b){

return a+b;

}

module.exports.subtraction = function(a,b){

return a-b;

}

module.exports.str="Hello";

//No change required in main.js

1. **Write a node.js program to demonstrate the concept of Non-Global Core Module.**

var fs= require('fs');

fs.writeFileSync("data.txt","This is demo file for fs module");

Now run this file as **$ node .\index.js**

var fs= require('fs');

fs.writeFileSync("D:/MCA/WTLab/data1.txt","This is demo file for fs module");

1. Write a node.js program to demonstrate the concept of Third-Party Module.

You can install third-party modules **globally** or **locally** in your project.

Examples: express, mongoose, react etc.

**For installation(Syntax):**

npm i module\_name(locally)(i is for install, you can write complete **‘install’**)

npm i module\_name -g(globally)

**Example1:**

**expressDemo1.js**

const express = require('express');

const app = express();

app.get('',(req, res)=>{

res.send('This is Express Demo Page');

});

app.get('/AboutUs',(req, res)=>{

    res.send('This is About Us page');

    });

app.listen(4000);

now run this file as **$ node .\expressDemo1.js**

now open the browser and type **localhost:4000** in the url to see the output

type another url as **localhost:4000/AboutUs** to see the AboutUs page

**Example2:**

First Create one file as index.html in any folder. And pass html file location as the first parameter of sendFile() method.

**expressDemo2.js**

const express = require('express');

const app = express();

app.get('', (req, res)=>{

res.sendFile('D:/MCA'+ '/index.html');

});

app.listen(3000);

now run this file as **$ node .\expressDemo.js**

now open the browser and type **localhost:3000** in the url to see the output