**Sarthak Gupta 21104001**

**IT B14**

**CBES LABTEST-1 Notes**

**API**

const express=require("express") const app=express()

app.use(express.urlencoded({extended:true})) app.use(express.json())

const port=8080

const fs=require("fs")

let data=fs.readFileSync("file.json","utf-8") data=JSON.parse(data) books=data["books"]

console.log(books) let count=5

app.get("/",(req,res)=>{ res.send("hii this is my code")

})

//read operation\*\*\*\* app.get("/book",(req,res)=>{

res.send(books)

})

app.get("/book/:id/",(req,res)=>{ let id=req.params.id console.log(id) book=books.filter((e)=>{

return e.id==id

})

res.send(book)

})

//create operarions\*\*\* app.post("/book/",(req,res)=>{

let body=req.body count++

let n={

"id":count, "title":body.title,

"pub\_year":body.pub\_year, "cost":body.cost

}

books.push(n) res.send(books)

})

//update operations\*\*\*\* app.put("/book/:id/",(req,res)=>{

let id=req.params.id

//console.log(id) let body=req.body

for(let i=0; i<books.length;i++)

{

if(books[i].id==id)

{

books[i].title=body.title books[i].pub\_year=body.pub\_year books[i].cost=body.cost

break

}

}

res.send(books)

})

//delete operations\*\*\*\* app.delete("/book/:id",(req,res

)=>{

let id=req.params.id book=books.filter((e)=>{

return e.id!=id

})

res.send(book)

})

//if not send error app.use((req,res)=>{

res.send("ERROR : request not found")

})

app.listen(port,()=>{

console.log("server listens at port:" + port)

})

# JSON string to JavaScript object

let data=`[

{

"name":"tanmay",

"marks":"100"

},

{

"name":"srk",

"marks":"90"

},

{

"name":"salman",

"marks":"0"

}

]`

try{

let s=JSON.parse(data) if(s!=null && Array.isArray(s)){

console.log(s);

}

}catch(error){

console.log("ERROR IN THE CODE")

}

# JavaScript object to JSON string

function solve(obj){ try{

let s=JSON.stringify(obj) return s

}catch(error){

console.log("ERROR IN CONVERSION") return null;

}

}

let obj={

name:"FERONIX", class:"HIGH CLASS",

hobby:"no hobby"

}

let s=solve(obj) if(s!=null){

console.log(s)

}

else{

console.log("THERE IS AN ERROR")

}

# VALIDATE

const Ajv = require("ajv"); const jd = {

"name": "tuntun",

};

const js = { "type": "object", "properties": {

"name": {"type": "string"},

"age": {"type": "number"}

},

"required": ["name","age"]

};

function validate(jd, js) { const ajv = new Ajv();

const validate = ajv.compile(js); const valid = validate(jd);

if (!valid) console.log(validate.errors); else console.log("correct")

}

validate(jd, js);