#AWT (20CP314T)

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ASSIGNMENT 1

1. Create a module named "calculator" using node js containing basic arithmetic functions such as addition, subtraction, division and multiplication. Perform arithmetic operations by importing the module. [CO1].

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calculator.js

```
function add(a, b) {
    return a + b;
}
function subtract(a, b) {
    return a - b;
}
function multiply(a, b) {
    return a * b;
}
function divide(a, b) {
    if (b === 0) {
        return "Cannot divide by zero";
    }
    return a / b;
}
module.exports = {
    add,
    subtract,
    multiply,
    divide
};
```

app.js

```
const calculator = require('./calculator');
const sum = calculator.add(14, 2);
console.log(`Sum: ${sum}`);
const difference = calculator.subtract(8, 4);
console.log(`Difference: ${difference}`);
const product = calculator.multiply(2, 6);
console.log(`Product: ${product}`);
const quotient = calculator.divide(10, 2);
console.log(`Quotient: ${quotient}`);
```

OUTPUT

```
PS F:\PDEU\SEM 6\SEM-6\AWT\THEORY\ASSIGNMENT 1> node app.js
Sum: 16
Difference: 4
Product: 12
Quotient: 5
```

2. Design a nodejs script to read a text file line by line and copy the contents of the text to another text file. [CO1].

app.js

```
const fs = require('fs');
const readline = require('readline');
function copyFile(inputFilePath, outputFilePath) {
    const inputStream = fs.createReadStream(inputFilePath);
    const outputStream = fs.createWriteStream(outputFilePath);
    const rl = readline.createInterface({
        input: inputStream,
        crlfDelay: Infinity
    });
    rl.on('line', (line) => {
        outputStream.write(`${line}\n`);
    });
    rl.on('close', () => {
        outputStream.end();
        console.log('File copied successfully.');
    });
}
const inputFilePath = 'input.txt';
const outputFilePath = 'output.txt';
copyFile(inputFilePath, outputFilePath);
```

OUTPUT

```
PS F:\PDEU\SEM 6\SEM-6\AWT\THEORY\ASSIGNMENT 1\Q2> node .\app.js
File copied successfully.
```

SEM-6 > AWT > THEORY > ASSIGNMENT 1 > Q2 > input.txt

```
1   I am big fan of following things
2       JJK
3       Black Pink
4       Marvel
```

SEM-6 > AWT > THEORY > ASSIGNMENT 1 > Q2 > output.txt

```
1   I am big fan of following things
2       JJK
3       Black Pink
4       Marvel
```