TP Socket

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G07

Client-side:

```
const net = require("net");

const server = net.createServer((socket) => {
  console.log("Client connected");

  socket.on("data", (data) => {
    const message = data.toString();
    console.log("Received message from client:", message);

    const values = message.split(" ");
    const num1 = parseFloat(values[0]);
    const num2 = parseFloat(values[1]);
    const operation = values[2];

    let result;
    switch (operation) {
      case "+":
        result = num1 + num2;
        break;
      case "-":
        result = num1 - num2;
        break;
      case "*":
        result = num1 * num2;
        break;
      case "/":
        result = num1 / num2;
        break;
      default:
        result = "Invalid operation";
    }

    socket.write(result.toString());
  });

  socket.on("end", () => {
    console.log("Client disconnected");
  });
});

const PORT = 8080;
server.listen(PORT, () => {
  console.log(`Server listening on port ${PORT}`);
});
```

Server-side

```
const net = require("net");
const readline = require("readline");

const rl = readline.createInterface({
  input: process.stdin,
  output: process.stdout,
});

const client = new net.Socket();

client.connect(8080, "localhost", () => {
  console.log("Connected to server");

  rl.question("Enter first number: ", (num1) => {
    rl.question("Enter second number: ", (num2) => {
      rl.question("Enter operator (+, -, *, /): ", (operator) => {
        const message = `${num1} ${num2} ${operator}`;
        console.log(message);
        client.write(message);
      });
    });
  });
});
```

```

  client.on("data", (data) => {
    console.log("Result:", data.toString());
    client.destroy();
  });

  client.on("close", () => {
    console.log("Connection closed");
    process.exit(0);
  });

```

server run:

```
PS C:\Users\acer\OneDrive - esi-sba.dz\Documents\Tp Socket> node Server-side.js
Server listening on port 8080
```

Client-run:

```
PS C:\Users\acer\OneDrive - esi-sba.dz\Documents\Tp Socket> node Client-side.js
Connected to server
Enter first number:
```

Server when client connects:

```
PS C:\Users\acer\OneDrive - esi-sba.dz\Documents\Tp Socket> node Server-side.js
Server listening on port 8080
Client connected
```

Client call:

```
PS C:\Users\acer\OneDrive - esi-sba.dz\Documents\Tp Socket> node Client-side.js
Connected to server
Enter first number: 10
Enter second number: 50
Enter operator (+, -, *, /): /
10 50 /
Result: 0.2
Connection closed
```

Server after client call:

```
PS C:\Users\acer\OneDrive - esi-sba.dz\Documents\Tp Socket> node Server-side.js
Server listening on port 8080
Client connected
Received message from client: 10 50 /
Client disconnected
```