Homework -

NodeJS

NodeJS Introduction

Link repository : https://github.com/saefulmuminin/hitung-geometri-nodejs.git

rumus geometri.js

```javascript
// geometri.js

// Menghitung luas persegi
exports.luasPersegi = (sisi) => {
    return sisi * sisi;
};

// Menghitung keliling persegi
exports.kelilingPersegi = (sisi) => {
    return 4 * sisi;
};

// Menghitung luas persegi panjang
exports.luasPersegiPanjang = (panjang, lebar) => {
    return panjang * lebar;
};

// Menghitung keliling persegi panjang
exports.kelilingPersegiPanjang = (panjang, lebar) =>
{    return 2 * (panjang + lebar);
};
```

Soal1.js

```js
// soal1.js

const geometri = require('./geometri');

// Menghitung luas dan keliling persegi
const sisiPersegi = 5;
const luasPersegi = geometri.luasPersegi(sisiPersegi);
const kelilingPersegi = geometri.kelilingPersegi(sisiPersegi);

console.log(`Luas Persegi: ${luasPersegi}`);
console.log(`Keliling Persegi: ${kelilingPersegi}`);

// Menghitung luas dan keliling persegi panjang
const panjangPersegiPanjang = 7;
const lebarPersegiPanjang = 3;
const luasPersegiPanjang = geometri.luasPersegiPanjang(panjangPersegiPanjang, lebarPersegiPanjang);
const kelilingPersegiPanjang = geometri.kelilingPersegiPanjang(panjangPersegiPanjang,
lebarPersegiPanjang);

console.log(`Luas Persegi Panjang: ${luasPersegiPanjang}`);
console.log(`Keliling Persegi Panjang: ${kelilingPersegiPanjang}`);
```

Soal2.js

```javascript
const fs = require('fs');

// Data sample
const logData = `
03/22 08:54:24 INFO   :......rsvp_flow_stateMachine: state RESVED, event T1OUT
03/22 08:54:24 TRACE  :.......rsvp_action_nHop: constructing a PATH
03/22 08:54:24 TRACE  :.......flow_timer_start: started T1
03/22 08:54:24 TRACE  :.......rsvp_flow_stateMachine: reentering state RESVED
03/22 08:54:24 TRACE  :.......mailslot_send: sending to (9.67.116.99:0)
03/22 08:54:35 TRACE  :......rsvp_event_mapSession: Session=9.67.116.99:1047:6 exists
03/22 08:54:35 EVENT  :.....api_reader: api request SENDER_WITHDRAW
03/22 08:54:35 INFO   :.......rsvp_flow_stateMachine: state RESVED, event PATHTEAR
03/22 08:54:35 TRACE  :.......traffic_action_oif: is to remove filter
03/22 08:54:35 INFO   :.........qosmgr_request: Ioctl to remove reservation successful
03/22 08:54:35 INFO   :.........rpapi_Reg_UnregFlow: RSVPRemActionName:  Entering
03/22 08:54:35 INFO   :.........rpapi_Reg_UnregFlow: ReadBuffer:  Entering
03/22 08:54:35 INFO   :.........rpapi_Reg_UnregFlow: ReadBuffer:  Exiting
03/22 08:54:35 INFO   :.........rpapi_Reg_UnregFlow: RSVPRemActionName:  Result = 0
03/22 08:54:35 INFO   :.........rpapi_Reg_UnregFlow: RSVPRemActionName:  Exiting
03/22 08:54:35 INFO   :.........rpapi_Reg_UnregFlow: flow[sess=9.67.116.99:1047:6,
source=9.67.116.98:8000] unregistered from CLCat2
03/22 08:54:35 EVENT  :.........qosmgr_response: DELRESP from qosmgr, reason=0, qoshandle=0
03/22 08:54:35 INFO   :.........qosmgr_response: src-9.67.116.98:8000 dst-9.67.116.99:1047 proto-6
03/22 08:54:35 TRACE  :...........traffic_reader: tc response msg=3, status=1
03/22 08:54:35 TRACE  :........rsvp_action_nHop: constructing a PATHTEAR
03/22 08:54:35 TRACE  :........flow_timer_stop: stopped T1
03/22 08:54:35 TRACE  :........flow_timer_stop: Stop T4
03/22 08:54:35 TRACE  :.......rsvp_flow_stateMachine: entering state SESSIONED
03/22 08:54:35 TRACE  :......mailslot_send: sending to (9.67.116.99:0)
03/22 08:54:35 TRACE  :......rsvp_event_propagate: flow[session=9.67.116.99:1047:6,
source=9.67.116.98:8000] ceased
03/22 08:54:35 EVENT  :.....api_reader: api request CLOSE
03/22 08:54:35 INFO   :......rsvp_flow_stateMachine: state SESSIONED, event PATHTEAR
03/22 08:54:35 PROTERR:......rsvp_flow_stateMachine: state SESSIONED does not expect event PATHTEAR
03/22 08:54:53 EVENT  :..mailslot_sitter: process received signal SIGTERM
03/22 08:54:53 INFO   :...check_signals: received TERM signal
03/22 08:54:53 INFO   :......term_policyAPI: UnRegisterFromPolicyAPI:  Entering
03/22 08:54:53 INFO   :......term_policyAPI: ReadBuffer:  Entering
03/22 08:54:53 INFO   :......term_policyAPI: ReadBuffer:  Exiting
03/22 08:54:53 INFO   :......term_policyAPI: UnRegisterFromPolicyAPI:  Result = 0
03/22 08:54:53 INFO   :......term_policyAPI: UnRegisterFromPolicyAPI:  Exiting
03/22 08:54:53 INFO   :......term_policyAPI: APITerminate:  Entering
03/22 08:54:53 INFO   :......term_policyAPI: APITerminate:  Exiting
03/22 08:54:53 INFO   :......term_policyAPI: Policy API terminated
03/22 08:54:53 INFO   :......dreg_process: deregistering process with the system
03/22 08:54:53 INFO   :......dreg_process: attempt to dereg (ifaeddrg_byaddr)
03/22 08:54:53 INFO   :......dreg_process: rc from ifaeddrg_byaddr  rc =0
03/22 08:54:53 INFO   :.....terminator: process terminated with exit code 0`;

// Menulis log ke file "log.txt"
fs.writeFile('log.txt', logData, (err) => {
  if (err) {
    console.error('Gagal menulis ke file log.txt:', err);
  } else {
    console.log('Log telah berhasil ditulis ke file log.txt');
  }
});
```