Last session : Rule Engine

-> Rule Engines are used to seperate java logic with business rules

-> Realtime use cases for rule engines

1) Loan Eligibility Determination
2) Insurance Plan Eligibility Determination

-> In IES application we are using Rule Engine to determine citizen eligibility for the plan.

-> ED module will interact with ED-RULES-API to determine citizen eligibility.

-> ED-RULES-API will take "citizen data" as input and it provides "plan data" as output

-> After recieving response from "ED-RULES-API" ED module will insert data into below 2 database tables.

1) ED_ELIGIBILITY_DETAILS
2) CO_TRIGGERS

```
create table co_triggers
(
        trg_id number,
        case_num number,
        create_dt date,
        trg_status varchar2(10),
        update_dt date,
        primary key (trg_id)
);
```

```
DECLARE
i number:=1;
trg_id number:=100;
case_no number:=1;
BEGIN
WHILE i <=10000 LOOP
    INSERT INTO CO_TRIGGERS(TRG_ID,CASE_NUM,CREATE_DT,TRG_STATUS,UPDATE_DT) VALUES
(trg_id,case_no,sysdate,'P',null);
    i:= i + 1;
    trg_id:=trg_id +1;
    case_no:=case_no+1;
  END LOOP;
END;
/
```

```
 create table eligibility_details (
       ed_trace_id number(10,0) not null,
        benefit_amt varchar2(255),
        case_num number(19,0),
        create_dt date,
        denial_reason varchar2(255),
        plan_end_dt varchar2(255),
        plan_name varchar2(255),
```

```
        plan_start_dt varchar2(255),
        plan_status varchar2(255),
        update_dt date,
        primary key (ed_trace_id)
    )

--------------------------------------------------------------------
DECLARE
i number:=1;
ed_trace_id number:=100;
case_no number:=1;
BEGIN
WHILE i <=10000 LOOP
    insert into ELIGIBILITY_DETAILS
values(ed_trace_id,'$600',case_no,sysdate,null,null,'SNAP',sysdate,'AP',null);
    i:= i + 1;
    ed_trace_id:=ed_trace_id +1;
    case_no:=case_no+1;
  END LOOP;
END;
/
--------------------------------------------------------------------------------
```

Assignment

1) Create Spring Boot application with below starters

   1) web
   2) data-jpa
   3) lombok
   4) swagger
   5) oracle

2) Create Entity classes & Repositories for below tables

   1) co_triggers
   2) eligibility_details

3) Execute PLSQL script in database (To insert data)