* We added an integrity constraint for year to be in the range (1950,2020)

drop schema if exists educationdata cascade;

create schema educationdata;

set search\_path to educationdata;

create table Subregions (

region VARCHAR(30) primary key,

check (region='Sub-Saharan Africa' OR region='Northern Africa' OR

region='Western Asia' OR region='Central Asia' OR

region='Southern Asia' OR region='Eastern Asia' OR

region='South-Eastern Asia' OR region='Latin America and the

Caribbean' OR region='Oceania' OR region='Europe' OR

region='Northern America'));

create table Countries (

country VARCHAR(30) primary key,

region VARCHAR(30) references Subregions not null,

check (country!='Antarctica'));

create table RegionData (

region VARCHAR(30) references Subregions not null,

educationLevel VARCHAR(11) not null,

yearRange VARCHAR(9) not null,

Teachers INT not null,

pupilTeacherRatio REAL not null,

grossEnrollmentRatioMale REAL not null,

grossEnrollmentRatioFemale REAL not null,

check (educationLevel='Primary' OR educationLevel='Secondary' OR

educationLevel='Tertiary'),

check (yearRange='2005-2010' OR yearRange='2010-2015'),

primary key (region, educationLevel, yearRange));

create table CountryData (

country VARCHAR(30) references Countries not null,

educationLevel VARCHAR(11) not null,

yearRange VARCHAR(9) not null,

publicExpenditure INT not null check (publicExpenditure >= 0 AND

publicExpenditure <= 100),

teachers INT not null,

pupilTeacherRatio REAL not null,

grossEnrollmentRatioMale REAL not null,

grossEnrollmentRatioFemale REAL not null,

check (educationLevel='Primary' OR educationLevel='Secondary' OR

educationLevel='Tertiary'),

check (yearRange='2005-2010' OR yearRange='2010-2015'),

primary key (country, educationLevel, yearRange));

create table CountryEdExpendPerGDP (

country VARCHAR(30) references Countries not null,

year SMALLINT check (year BETWEEN 1950 AND 2020) not null,

percentage SMALLINT check (percentage>=0) not null,

primary key (country, year));

create table CountryEdExpendPerOthers (

country VARCHAR(30) references Countries not null,

year SMALLINT check (year BETWEEN 1950 AND 2020) not null,

percentage SMALLINT not null,

check (percentage>=0 AND percentage<=100),

primary key (country, year));