Assignment Two - Scraping Twitter

Team #**67** - **'WORLD ENERGY'**

Group Participant- Only 1: Arpita Rai

GitHub: [***https://github.com/ArpitaRai/DMDD\_Project\_WorldEnergy****Links to an external site.*](https://github.com/ArpitaRai/DMDD_Project_WorldEnergy)

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**SQL Statements for the conceptual model:**

Database Connection:

database = MySQLdb.connect (host="localhost" , user="root" , password="root" ,db="DMDDWorldEnergy")

cursor = database.cursor()

**WorldEnergy Tables(Twitter Scrapped Data):**

1. **For WindEnergy**

"CREATE TABLE IF NOT EXISTS `DMDDWorldEnergy`.` WorldOnWindEnergy` (`UserName` VARCHAR(45) NULL,`UserCreatedAt` VARCHAR(45) NULL,`Description` VARCHAR(400) NULL,`TweetCreatedAt` VARCHAR(100) NULL,`Location` VARCHAR(100) NULL,`Tweet` VARCHAR(5000) NULL)"

1. For SolarEnergy

"CREATE TABLE IF NOT EXISTS `DMDDWorldEnergy`.`WorldOnSolarEnergy` (`UserName` VARCHAR(45) NULL,`UserCreatedAt` VARCHAR(45) NULL,`Description` VARCHAR(400) NULL,`TweetCreatedAt` VARCHAR(100) NULL,`Location` VARCHAR(100) NULL,`Tweet` VARCHAR(500) NULL)"

1. For RenewableEnergy

"CREATE TABLE IF NOT EXISTS `DMDDWorldEnergy`.`WorldOnRenewableEnergy` (`UserName` VARCHAR(45) NULL,`UserCreatedAt` VARCHAR(45) NULL,`Description` VARCHAR(400) NULL,`TweetCreatedAt` VARCHAR(100) NULL,`Location` VARCHAR(100) NULL,`Tweet` VARCHAR(5000) NULL)"

1. For CO2Emission

cO2Emission = "CREATE TABLE IF NOT EXISTS `DMDDWorldEnergy`.`CO2Emission` (`UserName` VARCHAR(45) NULL,`UserCreatedAt` VARCHAR(45) NULL,`Description` VARCHAR(400) NULL,`TweetCreatedAt` VARCHAR(100) NULL,`Location` VARCHAR(100) NULL,`Tweet` VARCHAR(5000) NULL)"

1. For Renewable Energy

"CREATE TABLE IF NOT EXISTS `DMDDWorldEnergy`.`WorldOnRenewableEnergy` (`UserName` VARCHAR(45) NULL,`UserCreatedAt` VARCHAR(45) NULL,`Description` VARCHAR(400) NULL,`TweetCreatedAt` VARCHAR(100) NULL,`Location` VARCHAR(100) NULL,`Tweet` VARCHAR(5000) NULL)"

DOMAIN TABLES:

CREATE TABLE `Domain\_RenewableEnergyConsumptionByFuelType` (

`idRenewableEnergyConsumptionByFuelType` int NOT NULL,

`FuelID` varchar(45) NOT NULL,

`Consumption` varchar(45) NOT NULL,

PRIMARY KEY (`idRenewableEnergyConsumptionByFuelType`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

CREATE TABLE `Domain\_CO2Emission` (

`idCO2EmissionDomain` int NOT NULL,

`CountryID` varchar(45) NOT NULL,

`CO2Emission` varchar(45) NOT NULL,

PRIMARY KEY (`idCO2EmissionDomain`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

CREATE TABLE `Domain\_CountryAndCode` (

`idCountryAndCode` int NOT NULL AUTO\_INCREMENT,

`CountryName` varchar(45) NOT NULL,

`Area` varchar(45) NOT NULL,

PRIMARY KEY (`idCountryAndCode`)

ENGINE=InnoDB AUTO\_INCREMENT=29 DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

CREATE TABLE `Domain\_FuelsAndTypes` (

`idFuelsAndTypes` int NOT NULL,

`FuelType` varchar(45) NOT NULL,

`FuelName` varchar(45) NOT NULL,

PRIMARY KEY (`idFuelsAndTypes`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

CREATE TABLE `Domain\_PrimaryEnergyConsumption` (

`idPrimaryEnergyConsumption` int NOT NULL,

`CountryId` varchar(45) DEFAULT NULL,

`Consumption` varchar(45) DEFAULT NULL,

PRIMARY KEY (`idPrimaryEnergyConsumption`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

CREATE TABLE `Domain\_PrimaryEnergyConsumption` (

`idPrimaryEnergyConsumption` int NOT NULL,

`CountryId` varchar(45) DEFAULT NULL,

`Consumption` varchar(45) DEFAULT NULL,

PRIMARY KEY (`idPrimaryEnergyConsumption`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

CREATE TABLE `Domain\_PrimaryEnergyConsumptionPerCapita` (

`idPrimaryEnergyConsumptionPerCapita` int NOT NULL,

`CountryID` varchar(45) NOT NULL,

`FuelID` varchar(45) NOT NULL,

`Consumption` varchar(45) NOT NULL,

PRIMARY KEY (`idPrimaryEnergyConsumptionPerCapita`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

CREATE TABLE `Domain\_RenewableEnergyConsumption` (

`idRenewableEnergyConsumption` int NOT NULL,

`CountryID` varchar(45) NOT NULL,

`EnergyConsumption` varchar(45) NOT NULL,

PRIMARY KEY (`idRenewableEnergyConsumption`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

CREATE TABLE `Domain\_RenewableEnergyConsumptionByFuelType` (

`idRenewableEnergyConsumptionByFuelType` int NOT NULL,

`FuelID` varchar(45) NOT NULL,

`Consumption` varchar(45) NOT NULL,

PRIMARY KEY (`idRenewableEnergyConsumptionByFuelType`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

CREATE TABLE `Domain\_RenewableEnergyGeneration` (

`idRenewableEnergyGeneration` int NOT NULL,

`CountryID` varchar(45) NOT NULL,

`EnergyGeneration` varchar(45) NOT NULL,

PRIMARY KEY (`idRenewableEnergyGeneration`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

**Constraint for Tweet table:**

ALTER TABLE `DMDDWorldEnergy`.`Domain\_CO2Emission`

ADD INDEX `LocationID\_idx` (`CountryID` ASC) VISIBLE;

;

ALTER TABLE `DMDDWorldEnergy`.`Domain\_CO2Emission`

ADD CONSTRAINT `LocationID`

FOREIGN KEY (`CountryID`)

REFERENCES `DMDDWorldEnergy`.`Domain\_CountryAndCode` (`CountryName`)

ON DELETE NO ACTION

ON UPDATE NO ACTION;

ALTER TABLE `DMDDWorldEnergy`.`WorldOnEnergy`

ADD INDEX `LocationID\_idx` (`CountryID` ASC) VISIBLE;

;

ALTER TABLE `DMDDWorldEnergy`.`Domain\_CO2Emission`

ADD CONSTRAINT `LocationID`

FOREIGN KEY (`CountryID`)

REFERENCES `DMDDWorldEnergy`.`Domain\_CountryAndCode` (`CountryName`)

ON DELETE NO ACTION

ON UPDATE NO ACTION;

ALTER TABLE `DMDDWorldEnergy`.`WorldOnSolarEnergy`

ADD INDEX `LocationID\_idx` (`CountryID` ASC) VISIBLE;

;

ALTER TABLE `DMDDWorldEnergy`.`Domain\_CO2Emission`

ADD CONSTRAINT `LocationID`

FOREIGN KEY (`CountryID`)

REFERENCES `DMDDWorldEnergy`.`Domain\_CountryAndCode` (`CountryName`)

ON DELETE NO ACTION

ON UPDATE NO ACTION;

ALTER TABLE `DMDDWorldEnergy`.` CO2Emission`

ADD INDEX `LocationID\_idx` (`CountryID` ASC) VISIBLE;

;

ALTER TABLE `DMDDWorldEnergy`.`Domain\_CO2Emission`

ADD CONSTRAINT `LocationID`

FOREIGN KEY (`CountryID`)

REFERENCES `DMDDWorldEnergy`.`Domain\_CountryAndCode` (`CountryName`)

ON DELETE NO ACTION

ON UPDATE NO ACTION;

ALTER TABLE `DMDDWorldEnergy`.`WorldOnRenewableEnergy\`

ADD INDEX `LocationID\_idx` (`CountryID` ASC) VISIBLE;

;

ALTER TABLE `DMDDWorldEnergy`.`Domain\_CO2Emission`

ADD CONSTRAINT `LocationID`

FOREIGN KEY (`CountryID`)

REFERENCES `DMDDWorldEnergy`.`Domain\_CountryAndCode` (`CountryName`)

ON DELETE NO ACTION

ON UPDATE NO ACTION;