CREATE TABLE Strand (

StrandID INTEGER PRIMARY KEY AUTOINCREMENT

NOT NULL,

StrandName TEXT NOT NULL

);

CREATE TABLE ExptType (

ExptTypeID INTEGER PRIMARY KEY AUTOINCREMENT

NOT NULL,

ExptTypeName TEXT NOT NULL

);

CREATE TABLE Annotation (

AnnotationID INTEGER PRIMARY KEY AUTOINCREMENT

NOT NULL,

AnnotationValue TEXT NOT NULL

);

CREATE TABLE Gene (

GeneID INTEGER PRIMARY KEY AUTOINCREMENT

NOT NULL,

Chromosome INTEGER NOT NULL,

Start INTEGER NOT NULL,

[End] INTEGER NOT NULL,

AnnotationID INTEGER REFERENCES Annotation (AnnotationID)

NOT NULL,

StrandID INTEGER REFERENCES Strand (StrandID)

NOT NULL

);

CREATE TABLE Experiment (

ExperimentID INTEGER PRIMARY KEY AUTOINCREMENT

NOT NULL,

ExperimentValue INTEGER NOT NULL,

GeneID INTEGER REFERENCES Gene (GeneID)

NOT NULL,

ExptTypeID INTEGER REFERENCES ExptType (ExptTypeID)

NOT NULL

);

CREATE TABLE Alias (

AliasID INTEGER PRIMARY KEY AUTOINCREMENT

NOT NULL,

AliasValue TEXT NOT NULL,

GeneID INTEGER REFERENCES Gene (GeneID)

NOT NULL

);