

MySQL code for creating Genbank database

```
mysql> CREATE TABLE gb_main(
-> acc_num VARCHAR(10) NOT NULL,
-> chrom_loc VARCHAR(20) NOT NULL,
-> gene_id VARCHAR(10) NOT NULL,
-> prot_name VARCHAR(50) NOT NULL,
-> locus_span VARCHAR(15) NOT NULL,
-> gene_span VARCHAR(15) NOT NULL,
-> cds_span VARCHAR(15) NOT NULL,
-> start_cod CHAR(8) NOT NULL,
-> PRIMARY KEY (acc_num)
-> );
```

```
mysql> CREATE TABLE gb_cds_map(
-> acc_num VARCHAR(10) NOT NULL,
-> cds_map VARCHAR(255),
-> PRIMARY KEY (acc_num),
-> FOREIGN KEY (acc_num) REFERENCES gb_main(acc_num)
-> );
```

```
mysql> CREATE TABLE gb_seq(
-> acc_num VARCHAR(10) NOT NULL,
-> locus_seq MEDIUMTEXT NOT NULL,
-> PRIMARY KEY (acc_num),
-> FOREIGN KEY (acc_num) REFERENCES gb_main(acc_num)
-> );
```

```
mysql> SHOW TABLES;
+-----+
| Tables_in_tg001 |
+-----+
| gb_cds_map      |
| gb_main         |
| gb_seq          |
+-----+
3 rows in set (0.00 sec)
```

```
mysql> DESCRIBE gb_main;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| acc_num    | varchar(10)   | NO   | PRI | NULL    |       |
| chrom_loc  | varchar(20)   | NO   |     | NULL    |       |
| gene_id    | varchar(10)   | NO   |     | NULL    |       |
| prot_name  | varchar(50)   | NO   |     | NULL    |       |
| locus_span | varchar(15)   | NO   |     | NULL    |       |
| gene_span  | varchar(15)   | NO   |     | NULL    |       |
| cds_span   | varchar(15)   | NO   |     | NULL    |       |
| start_cod  | char(8)       | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
mysql> DESCRIBE gb_cds_map;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| acc_num    | varchar(10)   | NO   | PRI | NULL    |       |
| cds_map    | varchar(255)  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> DESCRIBE gb_seq;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| acc_num    | varchar(10)   | NO   | PRI | NULL    |       |
| locus_seq  | mediumtext    | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```