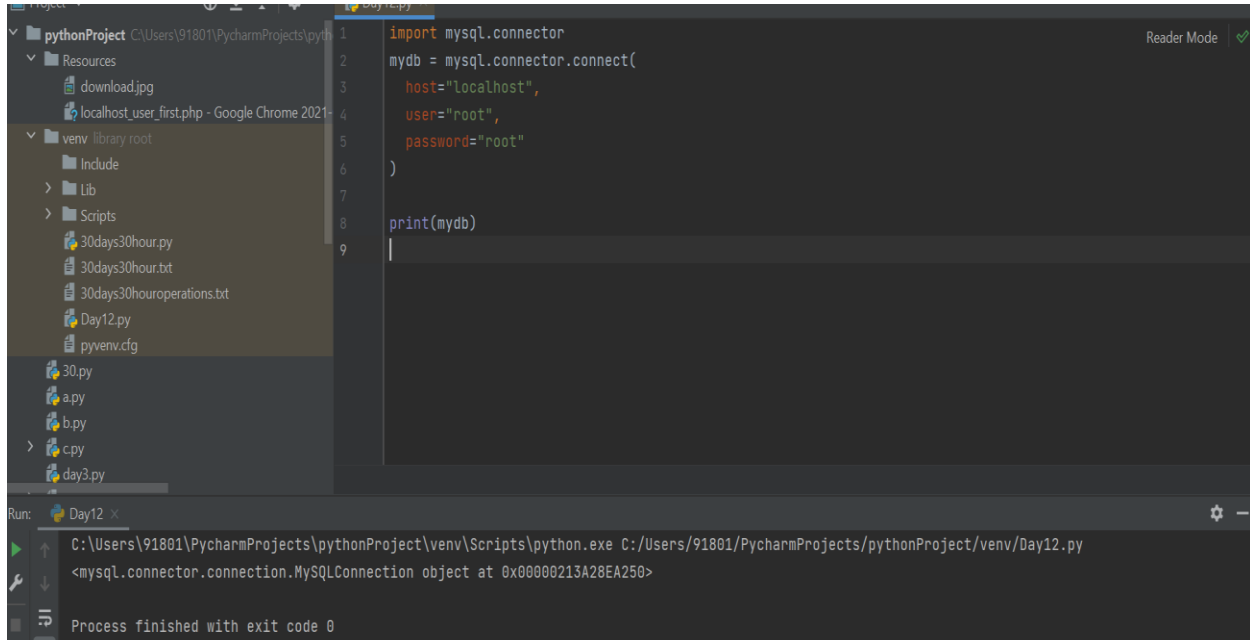


## 1. Create a connection for DB and print the version using a python program



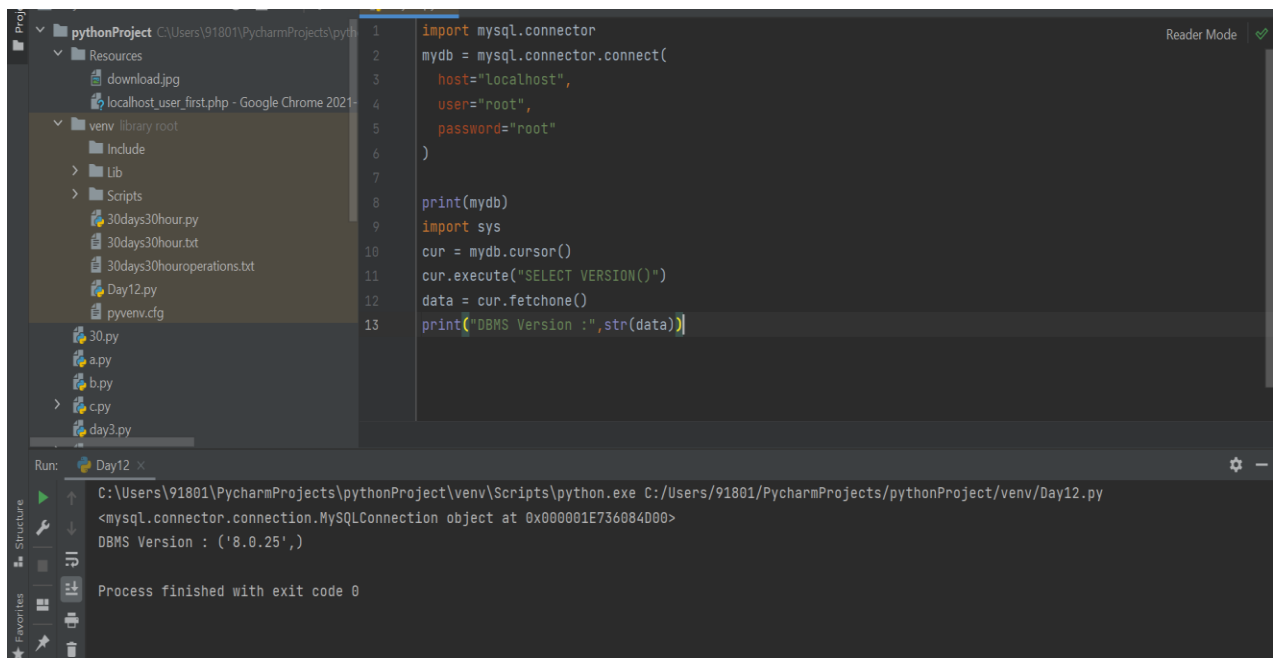
The screenshot shows the PyCharm IDE with a project named 'pythonProject'. The file explorer on the left shows a directory structure with files like 'Day12.py'. The main editor displays the following Python code:

```
1 import mysql.connector
2 mydb = mysql.connector.connect(
3     host="localhost",
4     user="root",
5     password="root"
6 )
7
8 print(mydb)
9
```

The Run window at the bottom shows the execution of 'Day12.py' using the Python interpreter in the virtual environment. The output is:

```
C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py
<mysql.connector.connection.MySQLConnection object at 0x00000213A28EA250>
```

The process finished with exit code 0.



The screenshot shows the PyCharm IDE with the same project. The file explorer on the left shows the same directory structure. The main editor displays the following Python code:

```
1 import mysql.connector
2 mydb = mysql.connector.connect(
3     host="localhost",
4     user="root",
5     password="root"
6 )
7
8 print(mydb)
9 import sys
10 cur = mydb.cursor()
11 cur.execute("SELECT VERSION()")
12 data = cur.fetchone()
13 print("DBMS Version :",str(data))
```

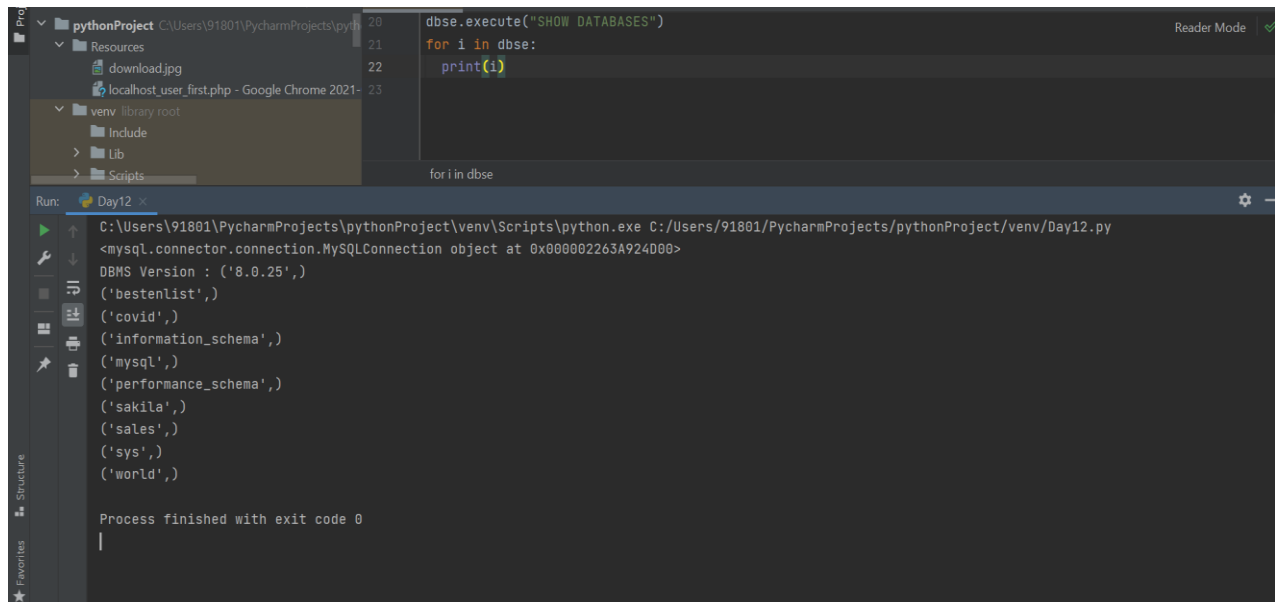
The Run window at the bottom shows the execution of 'Day12.py' using the Python interpreter in the virtual environment. The output is:

```
C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py
<mysql.connector.connection.MySQLConnection object at 0x000001E736084D00>
DBMS Version : ('8.0.25',)
```

The process finished with exit code 0.

## 2. Create a multiple tables & insert data in table

### 1. Creating database [bestenlist] and adding 3 Tables [ customers ,salesman, student ]



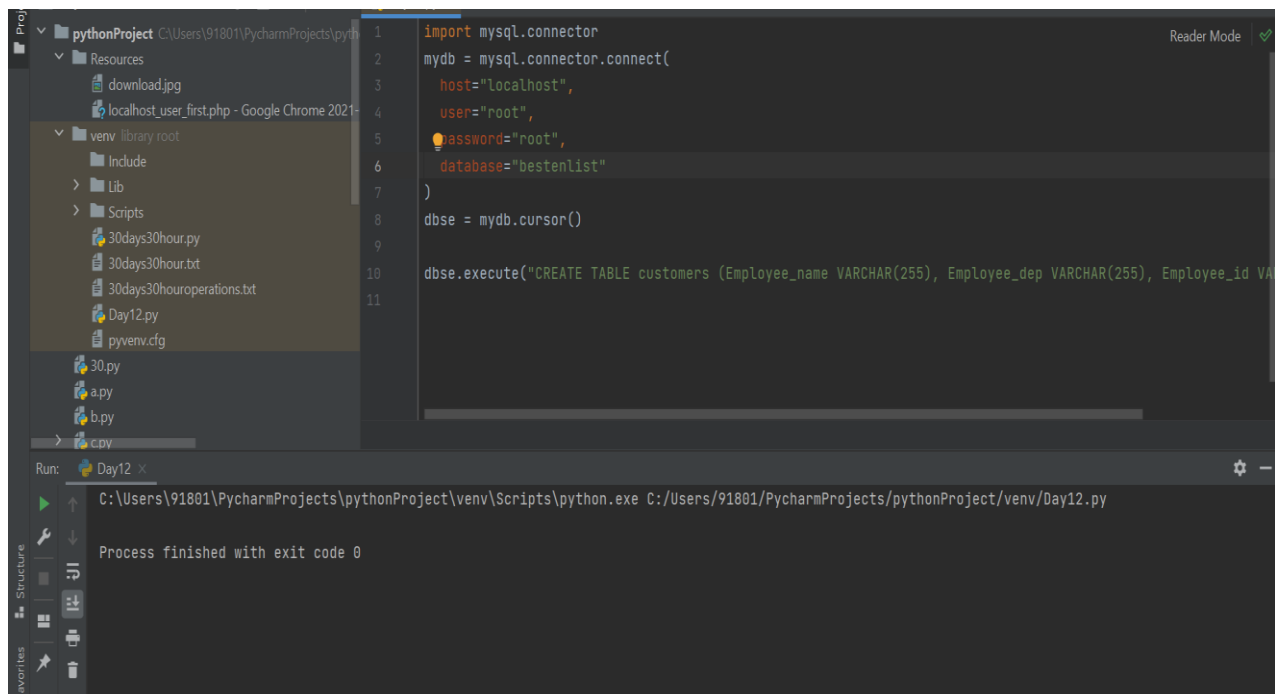
The screenshot shows the PyCharm IDE interface. The left sidebar displays the project structure for 'pythonProject', including a 'Scripts' folder. The main editor window shows a Python script with the following code:

```
20 dbse.execute("SHOW DATABASES")
21 for i in dbse:
22     print(i)
```

The 'Run' console at the bottom shows the output of the script, listing the databases found in the MySQL instance:

```
DBMS Version : ('8.0.25',)
('bestenlist',)
('covid',)
('information_schema',)
('mysql',)
('performance_schema',)
('sakila',)
('sales',)
('sys',)
('world',)
```

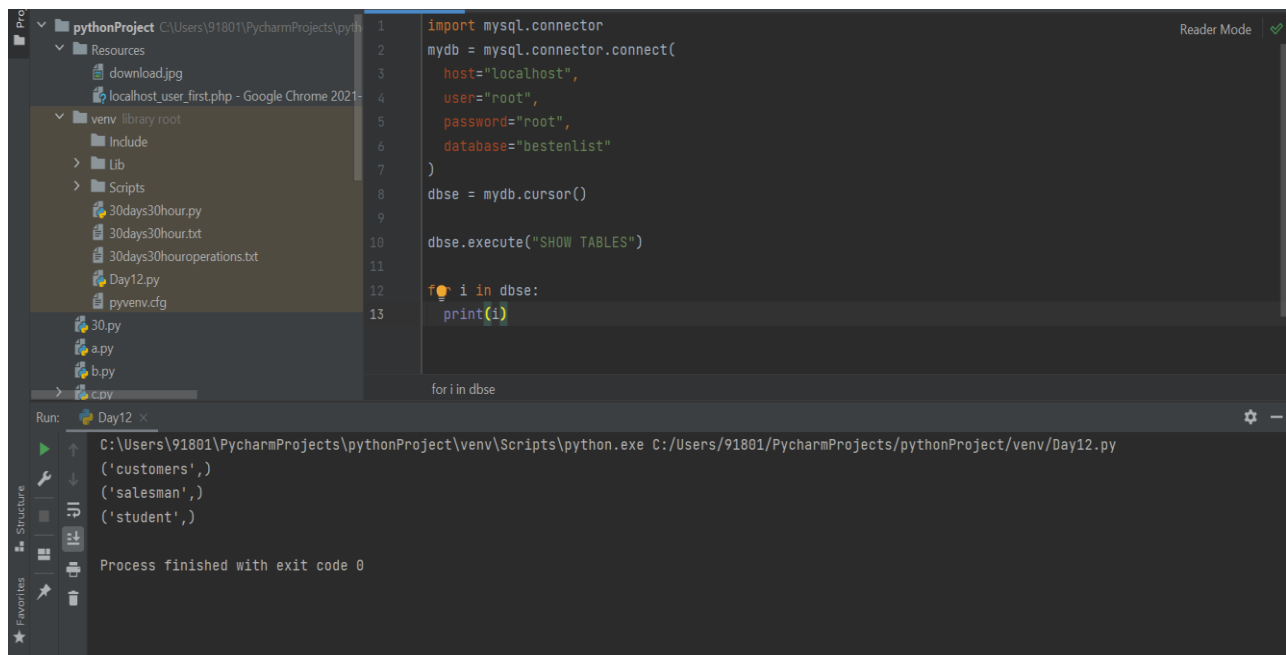
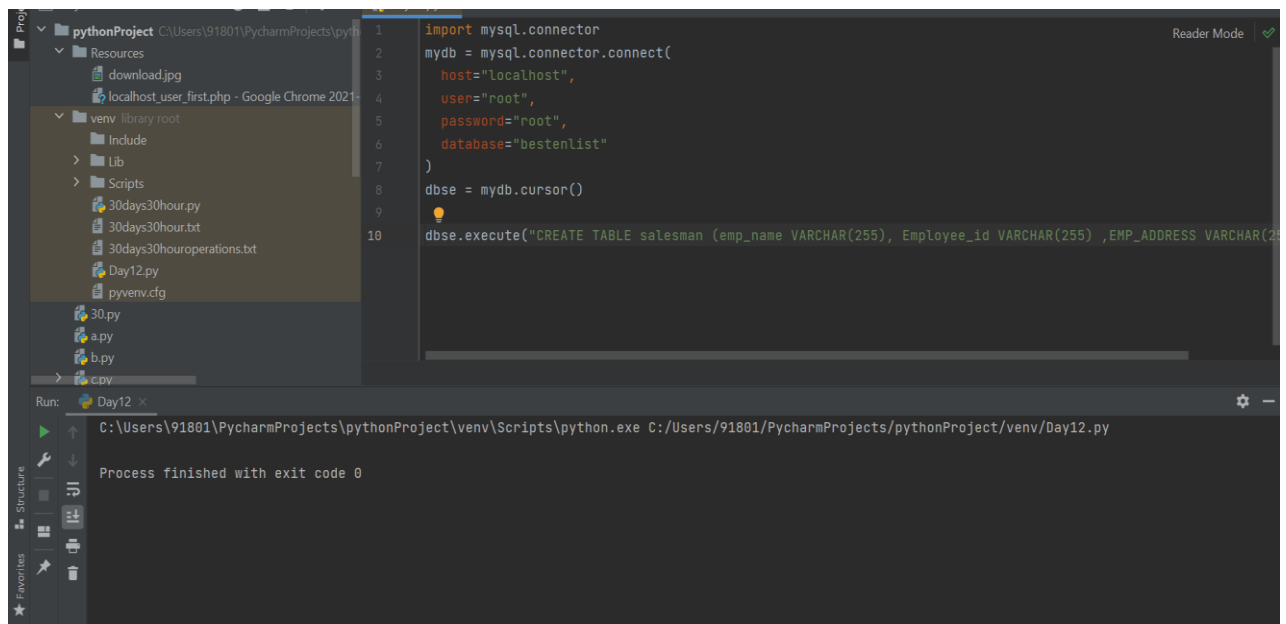
The process finished with exit code 0.



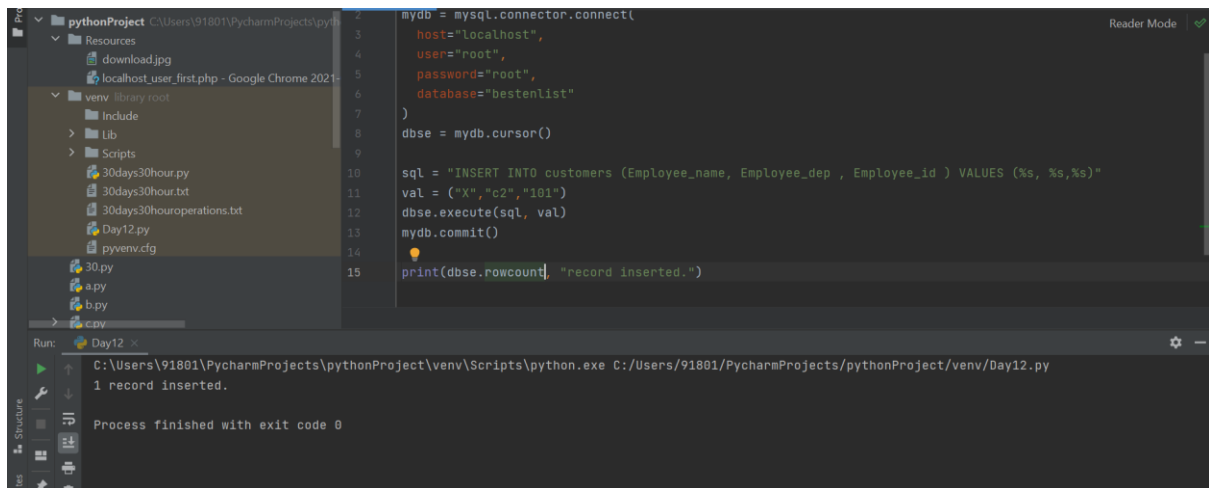
The screenshot shows the PyCharm IDE interface. The left sidebar displays the project structure for 'pythonProject', including a 'Scripts' folder. The main editor window shows a Python script with the following code:

```
1 import mysql.connector
2 mydb = mysql.connector.connect(
3     host="localhost",
4     user="root",
5     password="root",
6     database="bestenlist"
7 )
8 dbse = mydb.cursor()
9
10 dbse.execute("CREATE TABLE customers (Employee_name VARCHAR(255), Employee_dep VARCHAR(255), Employee_id VARCHAR(255))")
11
```

The 'Run' console at the bottom shows the output of the script, indicating that the process finished with exit code 0.

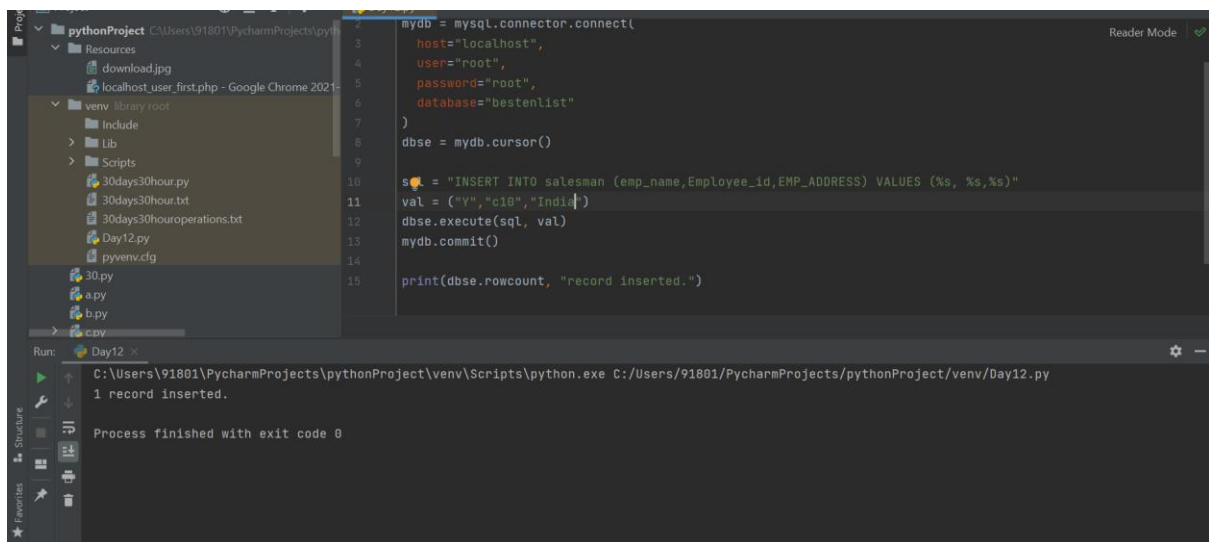


## 2.Inserting the Values into the table



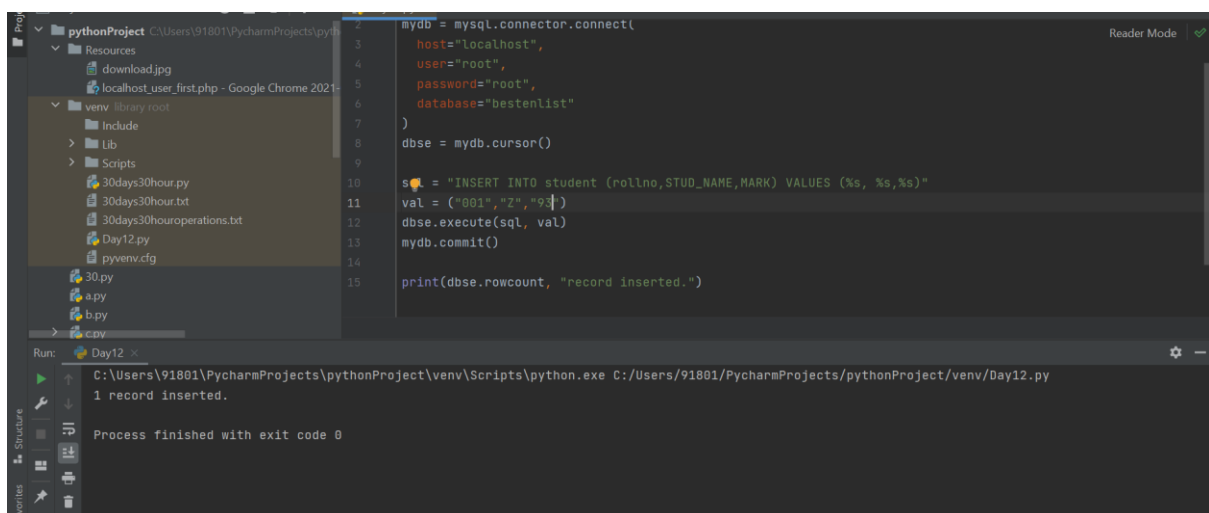
```
1 mydb = mysql.connector.connect(  
2     host="localhost",  
3     user="root",  
4     password="root",  
5     database="bestenlist"  
6 )  
7 dbse = mydb.cursor()  
8  
9  
10 sql = "INSERT INTO customers (Employee_name, Employee_dep , Employee_id ) VALUES (%s, %s,%s)"  
11 val = ("X","c2","101")  
12 dbse.execute(sql, val)  
13 mydb.commit()  
14  
15 print(dbse.rowcount, "record inserted.")
```

Run: Day12  
C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py  
1 record inserted.  
Process finished with exit code 0



```
1 mydb = mysql.connector.connect(  
2     host="localhost",  
3     user="root",  
4     password="root",  
5     database="bestenlist"  
6 )  
7 dbse = mydb.cursor()  
8  
9  
10 sql = "INSERT INTO salesman (emp_name,Employee_id,EMP_ADDRESS) VALUES (%s, %s,%s)"  
11 val = ("Y","c10","India")  
12 dbse.execute(sql, val)  
13 mydb.commit()  
14  
15 print(dbse.rowcount, "record inserted.")
```

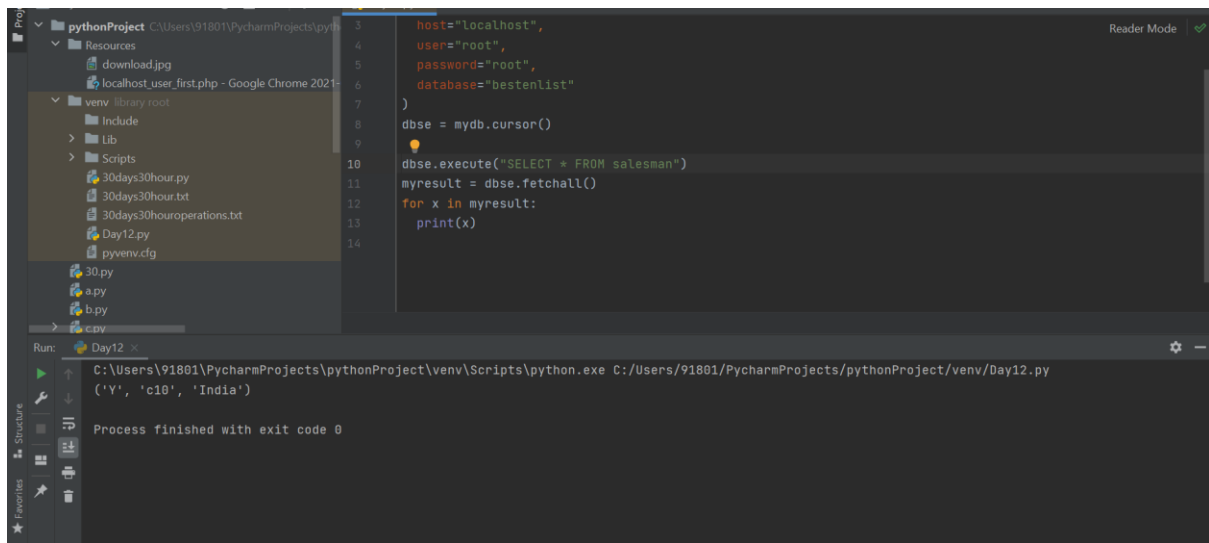
Run: Day12  
C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py  
1 record inserted.  
Process finished with exit code 0



```
1 mydb = mysql.connector.connect(  
2     host="localhost",  
3     user="root",  
4     password="root",  
5     database="bestenlist"  
6 )  
7 dbse = mydb.cursor()  
8  
9  
10 sql = "INSERT INTO student (rollno,STUD_NAME,MARK) VALUES (%s, %s,%s)"  
11 val = ("001","Z","95")  
12 dbse.execute(sql, val)  
13 mydb.commit()  
14  
15 print(dbse.rowcount, "record inserted.")
```

Run: Day12  
C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py  
1 record inserted.  
Process finished with exit code 0

## Viewing the Inserted Values From the Table[salesman,customers,student]

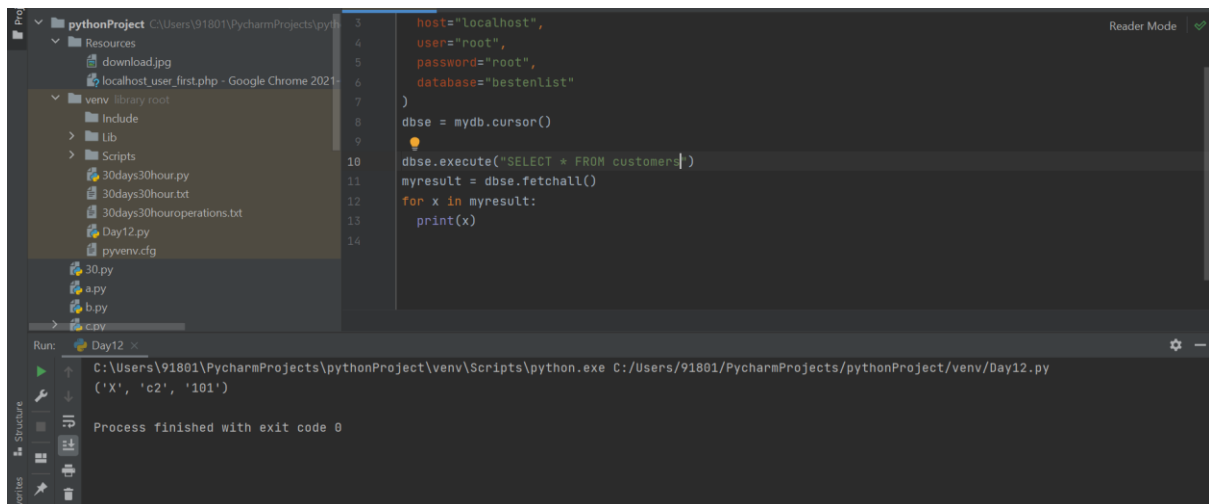


```
3 host="localhost",
4 user="root",
5 password="root",
6 database="bestenlist"
7 )
8 dbse = mydb.cursor()
9
10 dbse.execute("SELECT * FROM salesman")
11 myresult = dbse.fetchall()
12 for x in myresult:
13     print(x)
14
```

Run: Day12

C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py ('Y', 'c10', 'India')

Process finished with exit code 0

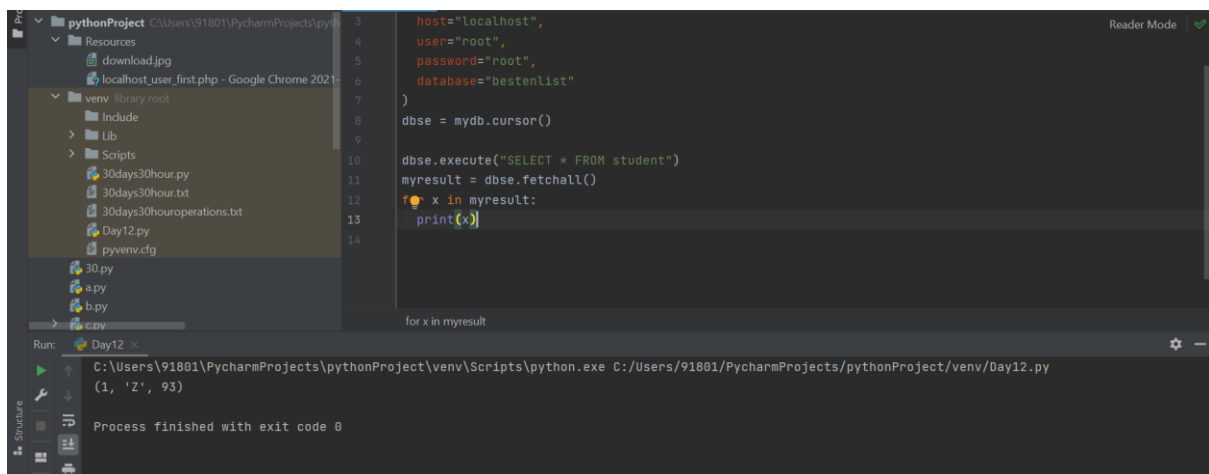


```
3 host="localhost",
4 user="root",
5 password="root",
6 database="bestenlist"
7 )
8 dbse = mydb.cursor()
9
10 dbse.execute("SELECT * FROM customers")
11 myresult = dbse.fetchall()
12 for x in myresult:
13     print(x)
14
```

Run: Day12

C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py ('X', 'c2', '101')

Process finished with exit code 0



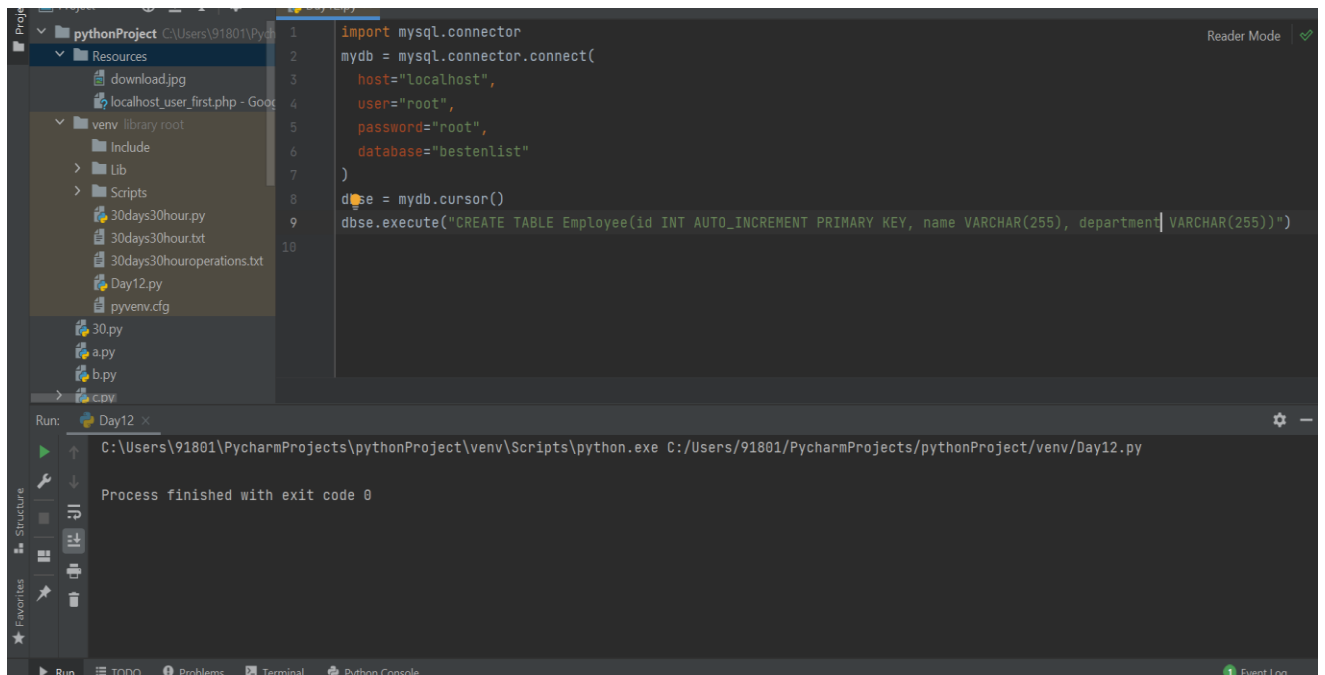
```
3 host="localhost",
4 user="root",
5 password="root",
6 database="bestenlist"
7 )
8 dbse = mydb.cursor()
9
10 dbse.execute("SELECT * FROM student")
11 myresult = dbse.fetchall()
12 for x in myresult:
13     print(x)
14
```

Run: Day12

C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py (1, 'Z', 93)

Process finished with exit code 0

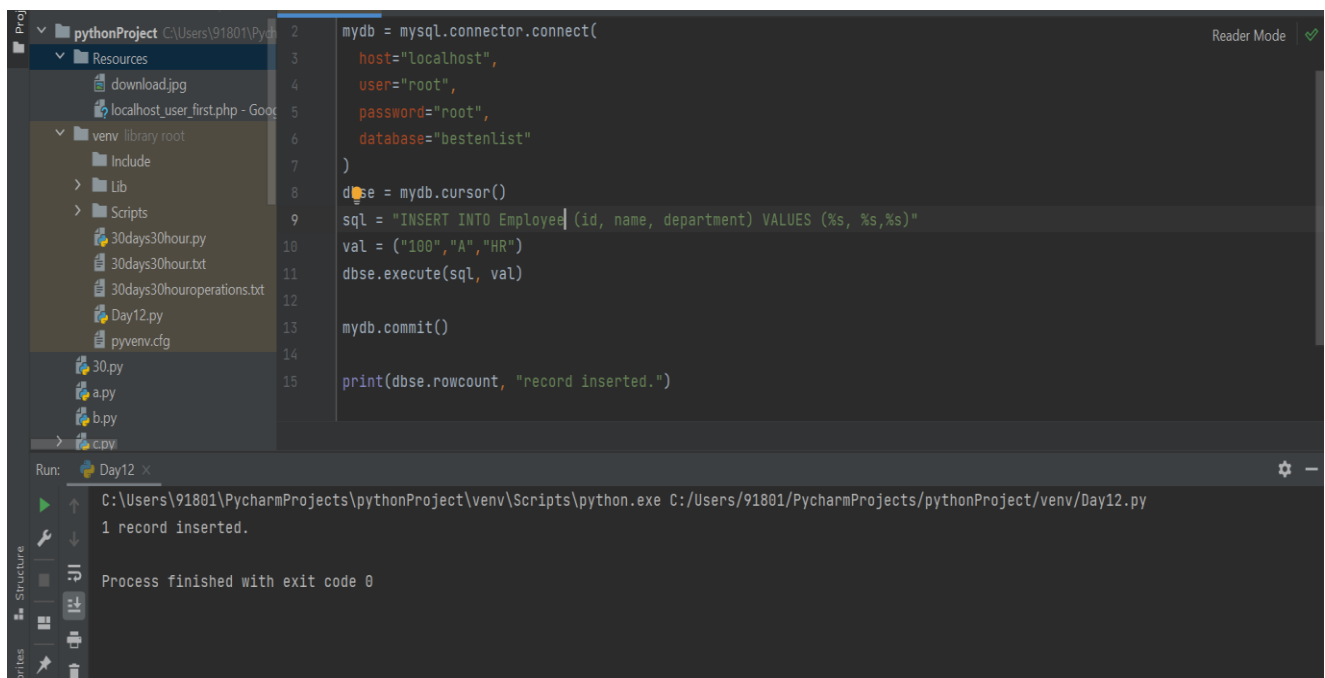
### 3. Create a employee table and read all the employee name in the table using for loop



The screenshot shows the PyCharm IDE with a Python project. The file explorer on the left shows a directory structure with a 'Scripts' folder containing 'Day12.py'. The main editor window displays the following Python code:

```
1 import mysql.connector
2 mydb = mysql.connector.connect(
3     host="localhost",
4     user="root",
5     password="root",
6     database="bestenlist"
7 )
8 dbse = mydb.cursor()
9 dbse.execute("CREATE TABLE Employee(id INT AUTO_INCREMENT PRIMARY KEY, name VARCHAR(255), department VARCHAR(255))")
10
```

The Run window at the bottom shows the command: `C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py` and the output: `Process finished with exit code 0`.



The screenshot shows the PyCharm IDE with the same Python project. The main editor window displays the following Python code:

```
2 mydb = mysql.connector.connect(
3     host="localhost",
4     user="root",
5     password="root",
6     database="bestenlist"
7 )
8 dbse = mydb.cursor()
9 sql = "INSERT INTO Employee(id, name, department) VALUES (%s, %s, %s)"
10 val = ("100", "A", "HR")
11 dbse.execute(sql, val)
12
13 mydb.commit()
14
15 print(dbse.rowcount, "record inserted.")
```

The Run window at the bottom shows the command: `C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py` and the output: `1 record inserted. Process finished with exit code 0`.

```
1 mydb = mysql.connector.connect(
2     host="localhost",
3     user="root",
4     password="root",
5     database="bestenlist"
6 )
7
8 dbse = mydb.cursor()
9 sql = "INSERT INTO Employee (id, name, department) VALUES (%s, %s,%s)"
10 val = [("101","B","HR"),("102","C","Testing"),("103","D","Managing"),("104","E","Analyst")]
11 dbse.executemany(sql, val)
12
13 mydb.commit()
14
15 print(dbse.rowcount, "record inserted.")
```

Run: Day12 x

C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py

4 record inserted.

Process finished with exit code 0

```
1 import mysql.connector
2 mydb = mysql.connector.connect(
3     host="localhost",
4     user="root",
5     password="root",
6     database="bestenlist"
7 )
8
9 dbse = mydb.cursor()
10 dbse.execute("SELECT * FROM Employee")
11
12 report = dbse.fetchall()
13
14 for x in report:
15     print(x)
```

Run: Day12 x

C:\Users\91801\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/91801/PycharmProjects/pythonProject/venv/Day12.py

(100, 'A', 'HR')

(101, 'B', 'HR')

(102, 'C', 'Testing')

(103, 'D', 'Managing')

(104, 'E', 'Analyst')

Process finished with exit code 0

