

## IBM DB2 CONNECT WITH PYTHON

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Project Name	SMART FASHION RECOMMENDER APPLICATION
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### IBM DB2 PROGRAM:

```
import ibm_db dictionary={ }
def printTableData(conn): sql
= "SELECT * FROM
userdetails" out =
ibm_db.exec_immediate(conn, sql) document
=
ibm_db.fetch_assoc(out)
while document != False:
dictionary.update({ document['USERNAME']:document['PASSWORD']})
document =ibm_db.fetch_assoc(out)
def insertTableData(conn,rollno,username,email,password): sql="INSERT
INTO userdetails(rollno,username,email,password) VALUES
({},{'','{'','{'})".format(rollno,username,email,password) out
= ibm_db.exec_immediate(conn,sql) print('Number of
affected rows : ',ibm_db.num_rows(out),"\\n") def
updateTableData(conn,rollno,username,email,password):
sql = "UPDATE userdetails SET
```

```

(username,email,password)=('{{','}','{{'}}') WHERE
rollno={{}}".format(username,email,password,rollno) out = ibm_db.exec_immediate(conn,
sql) print('Number of affected rows : ', ibm_db.num_rows(out), "\n")
def deleteTableData(conn,rollno):
sql = "DELETE FROM userdetails WHERE
rollno={{}}".format(rollno) out =
ibm_db.exec_immediate(conn, sql) print('Number of
affected rows : ', ibm_db.num_rows(out), "\n") try:

conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=0c77d6f2-5da9-48a9-81f8-
86b520b87518.bs2io90l
08kqb1od8lcg.databases.appdomain.cloud;PORT=31198;SECURITY=SSL;SSLServerCerti
f i cate=DigiCertGlo
balRootCA.crt;PROTOCOL=TCPIP;UID=bjn03696;PWD=ef96tLJX2VjzaCPX;", "",
"") print("Db connected")
except:
print("Error")

```

## CONNECT DB2 TO PYTHON:

```

{
"connection": {
"cli": {
"arguments": [
[
"-u",
"ygx96479",
"-p",
"7Bs17owIqUWBEIcV",
"--ssl",
"--sslCAFile",

```

```
"1dd14d0c-1b52-4f63-a606-53ecba28771d",
"--authenticationDatabase",
"admin",
"--host",
"3883e7e4-18f5-4afe-be8c-
fa31c41761d2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud:31498"
]
},
"bin": "db2",
"certificate": {
  "certificate_base64":
"LS0tLS1CRUdJTiBDRVJUSUZJQ0FURSB0tLS0tCk1JSURIVENDQWdXZ0F3SUJBZ0lV
T3dvMC9va09CUEN5RjFWeFJxVGhKRW9ubDBVd0RRWUpLb1pJaHZjTkFRRUwKQlF
Bd0hqRWNNQm9HQTFRUF3d1RTVUpOSUVOC2IzVmtJRvJoZEdGaVlYTmxjekFlRnc
weU1EQTRNRFF3TWpVMwpNalphRncwek1EQTRNREl3TWpVM01qWmFNQjR4SERB
YUJnTlZCQU1NRTBsQ1RTQkRiRzKxWkNCRVlYUmhZbUZ6ClpYTXdnZ0VpTUEwR0
NTcUdTSWlZrFFFQkFRVUFBNElCRHdBd2dnRUtBb0lCQVFEb0ZFNGQ0SGdOeXZM
UVIwR3gKQTB0amRXQnM4NVBJTDNyRStjN1R3K2diRUdQSUXJUVZV3o4Y1g1TG1
XQk0rY1FnOG9VeSsrQXJ3OEoxaXdRZQpySmIIU2I1clF4WTM0c3BQeGRFVEZkWEhS
cnJhMGU2VmM4MW42TlIJL0ZHSn11Q3hrTG5GMUfQW9hbHYwaDM2CnhDT0FvcXR
wTlFrTzNpMTRGeU0yRDRiajKxckI4RGk4Vy9XMVpVdVhMNGwzZXVLZUVCeTRuZm
hJV3kySVc3aUMKbGpMZ3RlN3hZTDVHbVpKOUdsYWtrSnJ1cnpNREFQLzVUYnRIU
UIydElodTBRSVRFZHIESVFYUEZGRDBHYzloZAo3M29JdnpVZUJ3VC9uRHN3OTJN
NC82SkdtZWpKN0lpdFBTN3Y2a2dlUVhINDIBaUVJNXpQdUVpVzNOYi9GR0pYCMY2
a2JBZ01CQUFHaV6QIJNqjBHQTFVZERnUVdCQIR2RzZ2RU5MRjFVbWZnQ003Mmx
OcmMzSDI2bURBZk1JnTlYKSFNRRUdEQVdnQIR2RzZ2RU5MRjFVbWZnQ003MmxOc
mMzSDI2bURBUEJnTlZlUk1CQWY4RUJUQUJBUUgvdTUEwRwpDU3FHU0liM0RRRU
JDd1VBQTRJQkFRQTgvdFVnUTZlaTZYWHZndDJ0dUdrbkpva1Y5UWNkaTNZbFVFW
kNDUytjCIVQZ3NnMnVBMldxcHIWTm1mRkhjcHZ1Vmp0VHRYTmk2NUM2WlZsRnY
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nZrZTZUdVNHNkxFRHJHbWpWaXVSQkpZdW4KT1RxWXROaVBHaHpuTHJrL0Fzam1
LMzBxQmFLTmFyNUdQajhqalpNb2RiZ04KLS0tLS1FTkQgQ0VSVElGSUNBVEUtLS0t
LQo=",
  "name": "1dd14d0c-1b52-4f63-a606-53ecba28771d"
},
"composed": [
```

```
"db2 -u ygx96479 -p 7Bs17owIqUWBEIcV --ssl --sslCAFile 1dd14d0c-1b52-4f63-a606-53ecba28771d --authenticationDatabase admin --host 3883e7e4-18f5-4afe-be8c-fa31c41761d2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud:31498"
```

```
],
```

```
"environment": {},
```

```
"type": "cli"
```

```
},
```

```
"db2": {
```

```
  "authentication": {
```

```
    "method": "direct",
```

```
    "password": "7Bs17owIqUWBEIcV",
```

```
    "username": "ygx96479"
```

```
  },
```

```
  "certificate": {
```

```
    "certificate_base64":
```

```
"LS0tLS1CRUdJTiBDRVJUSUZJQ0FURS0tLS0tCk1JSURIVENDQWdXZ0F3SUJBZ0lV
T3dvMC9va09CUEN5RjFWeFJxVGhKRW9ubDBVd0RRWUpLb1pJaHZjTkFRRUwKQlF
Bd0hqRWNNQm9HQTFVRUF3d1RTVUpOSUUVOC2IzVmtJRvJoZEdGaVlYTmxjekFIRnc
weU1EQTRNRFF3TWpVMwpNalphRncwek1EQTRNREl3TWpVM01qWmFNQjR4SERB
YUJnTlZCQU1NRTBsQ1RTQkRiRzKxWkNCRVlYUmhZbUZ6ClpYTXdnZ0VpTUEwR0
NTcUdTSWlZrFFFQkFRVUFBNElCRHdBd2dnRUtBb0lCQVFEb0ZFNGQ0SGdOeXZM
UVIwR3gKQTB0amRXQnM4NVBJTDNyRStjN1R3K2diRUdQSUXJ0VZV3o4Y1g1TG1
XQk0rY1FnOG9VeSsrQXJ3OEoxaXdRZQpySmlIU2I1clF4WTM0c3BQeGRFVEZkWEhS
cnJhMGU2VmM4MW42TlJL0ZHSn11Q3hrTG5GMUfQW9hbHYwaDM2CnhDT0FvcXR
wTlFrTzNpMTRGeU0yRDRiajkxckI4RGk4Vy9XMVpVdVhMNGwzZXVLZUVCeTRuZm
hJV3kySVc3aUMKbGpMZ3RlN3hZTDVHbVpKOUdsYWtrSnJ1cnpNREFQLzVUYnRIU
UlydElodTBRSVRFZHIESVFYUEZGRDBHYzloZAo3M29JdnpVZUJ3VC9uRHN3OTJN
NC82SkdtZWpKN0lpdFBTN3Y2a2dlUVhINDIBaUVJNXpQdUVpVzNOYi9GR0pYcMY2
a2JBZ01CQUFHaV6QlJNQjBHQTFVZERnUVdCQlR2RzZ2RU5MRjFVbWZnQ003Mmx
OcmMzSDI2bURBZklnTlYKSFNRRUdEQVdnQlR2RzZ2RU5MRjFVbWZnQ003MmxOc
mMzSDI2bURBUEJnTlZlUk1CQWY4RUJUQURBUUgvTUEwRwpDU3FHU0liM0RRRU
JDd1VBQTRJQkFRQTgvdFVnUTZlaTZYWHZndDJ0dUdrbkpva1Y5UWNkaTNZbFVFW
kNDUytjCIVQZ3NnMnVBMldxcHlWTm1mRkhjcHZ1Vmp0VHRYTmk2NUM2WlZsRnY
xc3p1cU9zdFB5bkJ4b1N4cUs0dkc0dTkKVjBWRUgxcEltZnZBSmxkV3c4UEJTZGJtTk1H
dGM4SzlWt0o5OVdBQ1ZFRXVXVGdDeHJKTXFBZnpYUXlidUV0dwp0cW1pV2swTm
VXNGk5ZEY4S2dTWUVaQWFodXVBSlRldXB2R2RPV1U0eEV4bm03aEVRbmZPV2ZI
TThDd08xNWFZCIRGQ2s0Q0pDUmR4Mlg5U284V3o1Z3MzcncyRkFDQlJyZ0NYeFFDZ
nZrZTZUdVNHNkxFRHJHbmpWaXVSQkpZdW4KT1RxWXROaVBHhHpuTHJrL0Fzam1
LMzBxQmFLTmFyNUdQajhqalpNb2RiZ04KLS0tLS1FTkQgQ0VSVElGSUNBVEUtLS0t
LQo=",
```

```
    "name": "1dd14d0c-1b52-4f63-a606-53ecba28771d"
```

```

    },
    "composed": [
      "db2://ygx96479:7Bs17owIqUWBEIcV@3883e7e4-18f5-4afe-be8c-
fa31c41761d2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud:31498/bludb?authSource=
admin&replicaSet=replset"
    ],
    "database": "bludb",
    "host_ros": [
      "3883e7e4-18f5-4afe-be8c-
fa31c41761d2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud:32314"
    ],
    "hosts": [
      {
        "hostname": "3883e7e4-18f5-4afe-be8c-
fa31c41761d2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud",
        "port": 31498
      }
    ],
    "jdbc_url": [
      "jdbc:db2://3883e7e4-18f5-4afe-be8c-
fa31c41761d2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud:31498/bludb:user=<userid
>;password=<your_password>;sslConnection=true;"
    ],
    "path": "/bludb",
    "query_options": {
      "authSource": "admin",
      "replicaSet": "replset"
    },
    "replica_set": "replset",
    "scheme": "db2",
    "type": "uri"
  }
},
"instance_administration_api": {

```

```
"deployment_id": "crn:v1:bluemix:public:dashdb-for-transactions:eu-  
gb:a/9dac66feef244fffb930a72a79baa179:e5d22361-8f0b-408c-b631-9b7d44603a8d::",  
  "instance_id": "crn:v1:bluemix:public:dashdb-for-transactions:eu-  
gb:a/9dac66feef244fffb930a72a79baa179:e5d22361-8f0b-408c-b631-9b7d44603a8d::",  
  "root": "https://apieugb.db2.cloud.ibm.com/v5/ibm"  
}  
}
```