**CREATE IBM DB2 AND CONNECT WITH PYTHON**

# Summary

# Open Source Packages have been added to the IBM I platform to enable developers to run popular open-source software on their platform.

# This page serves as a straightforward illustration of how to set up Python and query Db2 for i.

# This passage is a snippet taken from "Breaking out of PASE: Accessing the rest of your IBM I from Python."

# Environment

# While the open-source software itself is beyond the purview of a Support Line contract, the ACS product provides the functionality to let IBM I administrators quickly install it on their systems. Please go to IBM I Open Source Support.

# Steps

1. Set up a connection to an IBM I system by installing IBM I Access Client Solutions on a client computer.
2. Select "Open Source Package Management" from the "Tools" pull-down menu in the ACS console.
3. Set up the packages python3, python3-pip, IBM DB, and itoolkit. The installation of these packages will probably download additional prerequisite packages if there are no open-source packages already installed on your system.
4. Open an SSH Terminal to the same IBM I from the ACS console.
5. Install the PrettyTable python library: $ pip3 install PTable
6. Create a file with an extension of ".py" and use a text editor to add the following source code

from prettytable import from\_db\_cursor import ibm\_db\_dbi as db2 conn = db2.connect() cur = conn.cursor()

cur.execute("select \* from qiws.qcustcdt") print(from\_db\_cursor(cur))

1. Execute the script: $ python3 kpretty.py

Output:

marquis@MyIBMi:~/scripts$ python3 kpretty.py

+--------+----------+------+---------------+--------+-------+--------+---

-----+--------+---------+--------+

| CUSNUM | LSTNAM | INIT | STREET | CITY | STATE | ZIPCOD |

CDTLMT | CHGCOD | BALDUE | CDTDUE |

+--------+----------+------+---------------+--------+-------+--------+---

-----+--------+---------+--------+

| 938472 | Henning | G K | 4859 Elm Ave | Dallas | TX | 75217 | 5000 | 3 | 37.00 | 0.00 |

| 839283 | Jones | B D | 21B NW 135 St | Clay | NY | 13041 | 400 | 1 | 100.00 | 0.00 |

| 392859 | Vine | S S | PO Box 79 | Broton | VT | 5046 | 700 | 1 | 439.00 | 0.00 |

| 938485 | Johnson | J A | 3 Alpine Way | Helen | GA | 30545 |

9999 | 2 | 3987.50 | 33.50 |

| 397267 | Tyron | W E | 13 Myrtle Dr | Hector | NY | 14841 |

1000 | 1 | 0.00 | 0.00 |

| 389572 | Stevens | K L | 208 Snow Pass | Denver | CO | 80226 | 400 | 1 | 58.75 | 1.50 |

| 846283 | Alison | J S | 787 Lake Dr | Isle | MN | 56342 | 5000 | 3 | 10.00 | 0.00 |

| 475938 | Doe | J W | 59 Archer Rd | Sutter | CA | 95685 | 700 | 2 | 250.00 | 100.00 |

| 693829 | Thomas | A N | 3 Dove Circle | Casper | WY | 82609 |

9999 | 2 | 0.00 | 0.00 |

| 593029 | Williams | E D | 485 SE 2 Ave | Dallas | TX | 75218 |

200 | 1 | 25.00 | 0.00 |

| 192837 | Lee | F L | 5963 Oak St | Hector | NY | 14841 |

700 | 2 | 489.50 | 0.50 |

| 583990 | Abraham | M T | 392 Mill St | Isle | MN | 56342 |

9999 | 3 | 500.00 | 0.00 |

+--------+----------+------+---------------+--------+-------+--------+-------+--------+---------+--------+