Question
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Insert IRIS globals including Japanese into pandas dataframe

I tried to convert IRIS globals to pandas dataframe.

I can do it as follows if there are no Japanese included in globals,

```
USER>zw ^ISJ2
^ISJ2=4
^ISJ2(1)=$lb("Name","Age","Address")
^ISJ2(2)=$lb("Sato","50","Tokyo")
^ISJ2(3)=$lb("Kato","40","Osaka")
^ISJ2(4)=$lb("Ito","30","Kyoto")

USER>do $system.Python.Shell()

Python 3.9.5 (default, Jan 31 2022, 17:55:36) [MSC v.1927 64 bit (AMD64)] on win32
Type quit() or Ctrl-D to exit this shell.
>>> mysql = "select name,value from %library.global_get('user','^ISJ2',,2,2)"
>>> resultset = iris.sql.exec(mysql)
>>> dataframe = resultset.dataframe()
>>> print (dataframe)
       name                          value
0     ^ISJ2                             4
1  ^ISJ2(1)  $lb("Name","Age","Address")
2  ^ISJ2(2)     $lb("Sato","50","Tokyo")
3  ^ISJ2(3)     $lb("Kato","40","Osaka")
4  ^ISJ2(4)      $lb("Ito","30","Kyoto")
>>>
```

However,
I got the following error if the globals include Japanese.

Error #5002: Cache Error:%DispatchClassMethod+2^%SYSTEM.Python.1^1^ *<clas s 'UnicodeDecodeError'>: 'utf-8' codec can't decode byte 0x8d in position 5: invalid start byte - BuildPythonElement failed

It seems that I need to set encoding. How can I set encoding and avoid the error?

```
USER>zw ^ISJ
^ISJ=4
^ISJ(1)=$lb("Name","Age","Address")
^ISJ(2)=$lb("??","50","??")
^ISJ(3)=$lb("??","40","??")
^ISJ(4)=$lb("??","30","??")

USER>do $system.Python.Shell()

Python 3.9.5 (default, Jan 31 2022, 17:55:36) [MSC v.1927 64 bit (AMD64)] on win32
Type quit() or Ctrl-D to exit this shell.
>>> mysql = "select name,value from %library.global_get('user','^ISJ',,2,2)"
```

```
>>> resultset = iris.sql.exec(mysql)
>>> dataframe = resultset.dataframe()
Traceback (most recent call last):
  File "<input>", line 1, in <module>
RuntimeError: ??? #2802: %ML cannot create dataframe.
  > ??? #5002: Cache ???:<SYNTAX>%DispatchClassMethod+2^%SYSTEM.Python.1^1      ^ *<c
lass 'UnicodeDecodeError'>: 'utf-8' codec can't decode byte 0x8d in position 5: inval
id start byte - BuildPythonElement failed
>>>
```

#Python #InterSystems IRIS
Product version: IRIS 2021.2
$ZV: IRIS for Windows (x86-64) 2021.2 (Build 651U) Mon Jan 31 2022 17:39:05 EST

Source URL:https://community.intersystems.com/post/insert-iris-globals-including-japanese-pandas-dataframe