

first_notebook

July 20, 2022

1 First notebook

Short examples on some pieces of the modules.

```
[1]: from jyquickhelper import add_notebook_menu
      add_notebook_menu()
```

```
[1]: <IPython.core.display.HTML object>
```

1.1 CodeNodeVisitor

```
[2]: import ast
      import inspect
      from pysqllike.translation.node_visitor_translator import CodeNodeVisitor

      def myjob(input):
          iter = input.select (input.age, input.nom, age2 = input.age2*input.age2)
          wher = iter.where( (iter.age > 60).Or(iter.age < 25))
          return wher

      code = inspect.getsource(myjob)
      node = ast.parse(code)
      v = CodeNodeVisitor()
      v.visit(node)
      for r in v.Rows :
          print("{0}{1}: {2}".format(" " * r["indent"], r["type"], r["str"]))
```

Module:

```
FunctionDef: myjob
  arguments:
    arg: input
  Assign:
    Name: iter
    Call: select
      Attribute: input.select
      Attribute: input.age
      Attribute: input.nom
      keyword: age2
      BinOp:
        Attribute: input.age2
      Mult:
```

```

        Attribute: input.age2
Assign:
  Name: wher
  Call: where
    Attribute: iter.where
    Call: Or
      Attribute: Or
        Compare:
          Attribute: iter.age
          Gt:
            Num: 60
        Compare:
          Attribute: iter.age
          Lt:
            Num: 25
  Return:
    Name: wher

```

1.2 Translate into Python

```
[3]: from pysqllike.translation.translation_to_python import Translate2Python
trans = Translate2Python(myjob)
code = trans.Code()
print(code)
```

```

def myjob(input):
    iter = [ ]
    for row in input:
        _age=row['age']
        _nom=row['nom']
        _age2=row['age2']
        newr = {
            'age':_age,
            'nom':_nom,
            'age2':_age*_age2,
        }
        iter.append(newr)
    wher = [ ]
    for row in iter:
        _age=row['age']
        _exp=( _age>60) or ( _age<25)
        if _exp: wher.append(row)
    return wher

```

```
[4]:
```