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Assignment AIR-2

code:

```
from nltk.chat.util import Chat, reflections
```

```
pairs = [
    [
        r"my name is(.*)",
        ["Hello %1, how are you today?",[
    ],
    [
        r"what is your name?",
        ["My name is Jarvis and I will help you with your finacial queries today."],
    ],
    [
        r"where to put(.*)money",
        ["Basically there are many options to invest- 1.Regional and 2.Stocks.\nIn which section would you like to invest?",[
    ],
    [
        r"Regional(.*)",
        ["There are many- SBI,HSBC,DB. Which bank would you like to go for?",[
    ],
    [
        r"SBI(.*)",
        ["SBI offers 10 percent Interest."],
    ],
    [
        r"DB(.*)",
        ["DB offers 09 percent Interest."],
    ],
    [
        r"HSBC(.*)",
        ["HSBC offers 11 percent Interest."],
    ],
    [
        r"(.*)Stocks(.*)",
        ["We have 2 companies to offer: 1. AAA 2. BBB.\n choose any one to know more.\n",]
    ],
    [
        r"AAA(.*)",
        ["The company AAA has a ROI = 10 percent",]
    ],
    [
        r"BBB(.*)",
        ["The company BBB has a ROI = 12 percent",]
    ],
],
```

```
[
    r"hi|hey|hello(.*)",
    ["Hello", "Hey there",]
],
[
    r"quit",
    ["Signing out, see you again ^_^",]
],
]
```

```
def chatbot():
```

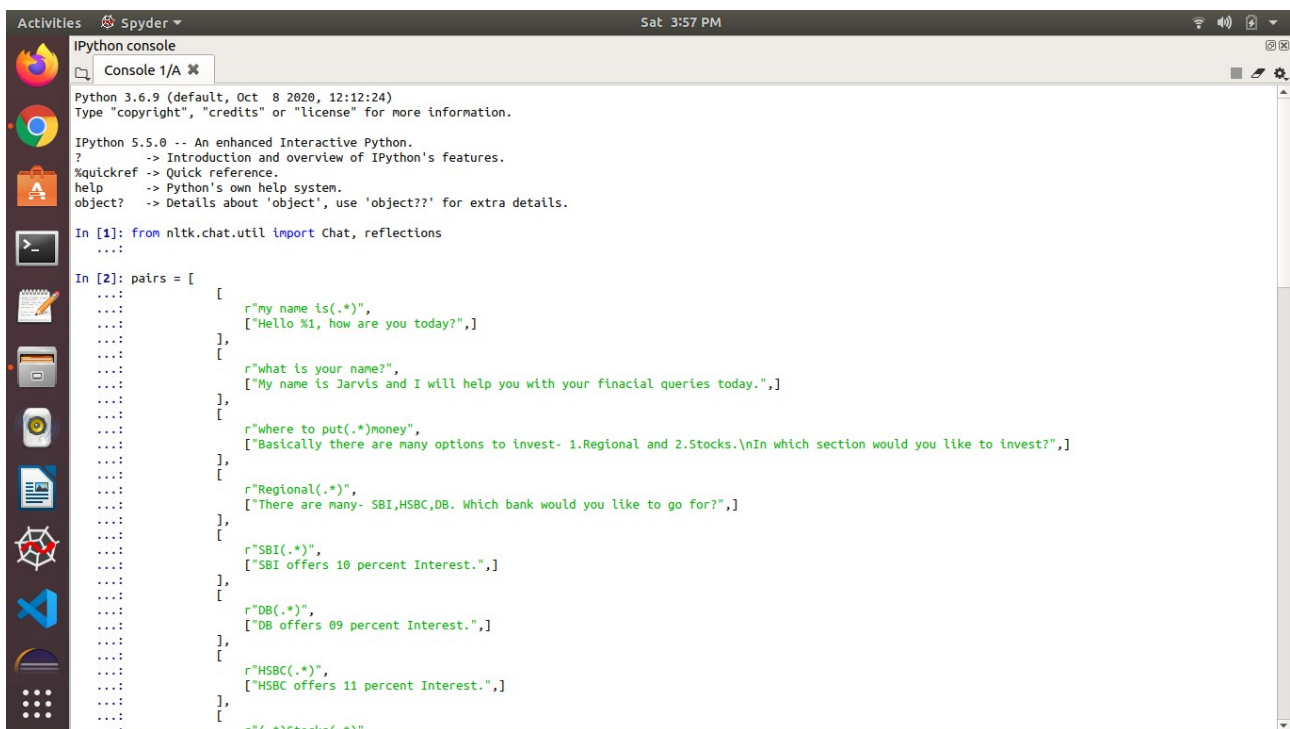
```
    """Chat is the class that contains all the logic to be used by the chatbot,
    reflections is a predefined dictionary containing a set of input values and it's corresponding
    output values
    """
```

```
    print("Booting up...\nHey I am a simple ChatBot made without ML, only using NLTK library.\n
    Please type in English language (lower case) what you want to ask me.\nPress Q to exit")
```

```
    chat = Chat(pairs, reflections)
    chat.converse()
```

```
if __name__ == "__main__":
    chatbot()
```

output:



The screenshot shows the Spyder Python IDE interface. The IPython console window is active, displaying the following code and output:

```
Python 3.6.9 (default, Oct 8 2020, 12:12:24)
Type "copyright", "credits" or "license()" for more information.

IPython 5.5.0 -- An enhanced Interactive Python.
? -> Introduction and overview of IPython's features.
%quickref -> Quick reference.
help -> Python's own help system.
object? -> Details about 'object', use 'object??' for extra details.

In [1]: from nltk.chat.util import Chat, reflections
...:

In [2]: pairs = [
...:     [
...:         r"my name is(.*)",
...:         ["Hello %1, how are you today?,"],
...:     ],
...:     [
...:         r"what is your name?",
...:         ["My name is Jarvis and I will help you with your finacial queries today.",],
...:     ],
...:     [
...:         r"where to put(.*)money",
...:         ["Basically there are many options to invest- 1.Regional and 2.Stocks.\nIn which section would you like to invest?,"],
...:     ],
...:     [
...:         r"Regional(.*)",
...:         ["There are many- SBI,HSBC,DB. Which bank would you like to go for?,"],
...:     ],
...:     [
...:         r"SBI(.*)",
...:         ["SBI offers 10 percent Interest.",],
...:     ],
...:     [
...:         r"DB(.*)",
...:         ["DB offers 09 percent Interest.",],
...:     ],
...:     [
...:         r"HSBC(.*)",
...:         ["HSBC offers 11 percent Interest.",],
...:     ],
...:     [
...:         r"(.*)Stocks(.*)",
...:         ["Stocks offer 12 percent Interest.",],
...:     ],
...: ]
```

```
Activities Spyder Sat 3:57 PM
IPython console
Console 1/A ✖

...: r"(.*)Stocks(.*)",
...: ["We have 2 companies to offer: 1. AAA 2. BBB.\n choose any one to know more.\n"],
...: ],
...: [
...:     r"AAA(.*)",
...:     ["The company AAA has a ROI = 10 percent",]
...: ],
...: [
...:     r"BBB(.*)",
...:     ["The company BBB has a ROI = 12 percent",]
...: ],
...: ],
...: [
...:     r"hi|hey|hello(.*)",
...:     ["Hello", "Hey there",]
...: ],
...: [
...:     r"quit",
...:     ["Signing out, see you again ^_^",]
...: ],
...: ]

In [3]: def chatbot():
...:     '''Chat is the class that contains all the logic to be used by the chatbot,
...:     reflections is a predefined dictionary containing a set of input values and it's corresponding output values
...:     '''
...:     print("Booting up...\nHey I am a simple ChatBot made without ML, only using NLTK library.\n Please type in English language (lower case) what you want to ask
me.\nPress Q to exit")
...:     chat = Chat(pairs, reflections)
...:     chat.converse()
...:

In [4]: if __name__ == "__main__":
...:     chatbot()
...:

Booting up...
Hey I am a simple ChatBot made without ML, only using NLTK library.
Please type in English language (lower case) what you want to ask me.
Press Q to exit
>hi
```

```
Activities Spyder Sat 3:57 PM
IPython console
Console 1/A ✖

...: r"hi|hey|hello(.*)",
...: ["Hello", "Hey there",]
...: ],
...: [
...:     r"quit",
...:     ["Signing out, see you again ^_^",]
...: ],
...: ]

In [3]: def chatbot():
...:     '''Chat is the class that contains all the logic to be used by the chatbot,
...:     reflections is a predefined dictionary containing a set of input values and it's corresponding output values
...:     '''
...:     print("Booting up...\nHey I am a simple ChatBot made without ML, only using NLTK library.\n Please type in English language (lower case) what you want to ask
me.\nPress Q to exit")
...:     chat = Chat(pairs, reflections)
...:     chat.converse()
...:

In [4]: if __name__ == "__main__":
...:     chatbot()
...:

Booting up...
Hey I am a simple ChatBot made without ML, only using NLTK library.
Please type in English language (lower case) what you want to ask me.
Press Q to exit
>hi
Hello
>my name is prem
Hello prem, how are you today?
>fine
None
>quit
Signing out, see you again ^_^
In [5]:
```