Please download the Forward and backward algorithm code from 2.7 Forward and Backward

How to generate the data

Please use generator.py file if you want to generate the data with new parameters. Uncomment line 64 `save_obj(output_sequences,"sequence_output")` to save the data dictionary in pickle format. I have written the script in a way so that it would be eaisier to understand for everyone. You are welcome to optimize or change it according to your requirements.

How to load sequence_output.pkl file

Use the following code to load the data file.

```
def load_obj(name ):
    with open('./' + name + '.pkl', 'rb') as f:
        return pickle.load(f)
sequence_outputs = load_obj("sequence_output")
```

The data file contains dictionary of dictionaries. The first level dictionary has keys as pairs e.g. (1,2) represents player 1 and player 2. Then each first level key has R keys which are rounds e.g [1, 2, 3, 4, 5, 6, 7, 8, 9, 10] and each r has the output sequence of observation. I have kept N = 20, M = 30 and R = 10. You can see all the first level keys (player pairs) using `print sequence_outputs.keys()` and rounds for pair (1,2) using `print sequence_outputs[(1,2)].keys()`.

Linear Solver

Please use the numpy linear solver `numpy.linalg.solve` if required.

- Numpy Linear Solver - Solver documentation

Example:

See the example code to solve the linear equations `3 * x0 + x1 = 9` and `x0 + 2 * x1 = 8`:

Code

```
a = np.array([[3,1], [1,2]])
b = np.array([9,8])
x = np.linalg.solve(a, b)
print 'output = ',x

```

```
output = array([ 2.,  3.])
```