Import Satements

```python
In [1]:  import sys
         import urllib
         import datetime
         import pandas as pd
         from urllib.request import urlopen, urlretrieve
         from bs4 import BeautifulSoup
         import pandasql
         import mysql.connector
         from sqlalchemy import create_engine
         import pymysql
```

Functions

```python
In [2]:  def get_data(href):
             url_open = urllib.request.urlopen('https://download.bls.gov' + hre
         f)
             html_doc = url_open.read().decode('utf-8')
             soup = BeautifulSoup(html_doc,'html.parser')
             soupstr = str(soup)
             souplist = soupstr.split('\r\n')
             column_names = souplist[0].split('\t')
             data = [row.split('\t') for row in souplist[1:]]
             df = pd.DataFrame(data, columns = column_names)
             return df
```

Get Earnings Data From BUREAU OF LABOR STATISTICS

```python
In [3]: bls = urllib.request.urlopen('https://download.bls.gov/pub/time.series
        /le/')
        html_doc = bls.read().decode('utf-8')
        soup = BeautifulSoup(html_doc,'html.parser')

        a = []
        for link in soup.find_all('a'):
            a.append(link.get('href'))

        data = {}
        for i in range(1,len(a)):
            if 'txt' in a[i]:
                continue
            data[a[i].split('/le/le.')[1].replace('.','_')] = get_data(a[i])
```

```python
In [4]: list(data.keys())
```

```
Out[4]: ['ages',
         'born',
         'cert',
         'class',
         'contacts',
         'data_0_Current',
         'data_1_AllData',
         'earn',
         'education',
         'fips',
         'footnote',
         'indy',
         'lfst',
         'occupation',
         'orig',
         'pcts',
         'race',
         'seasonal',
         'series',
         'sexs',
         'tdata',
         'unin']
```

```
In [5]: data['data_1_AllData'] = data['data_1_AllData'].rename(
            columns={'series_id        ': 'series_id', '        value':'value'}
        )

        data['data_0_Current'] = data['data_0_Current'].rename(
            columns={'series_id        ': 'series_id', '        value':'value'}
        )

        data['series'] = data['series'].rename(
            columns={'series_id        ': 'series_id'})
```

Database Connection

```
In [6]: engine = create_engine("mysql+pymysql://root:********@localhost/bls_ea
        rnings")
        con = engine.connect()
```

Insert All Tables Into Database

```
In [7]: for tablename in data.keys():
            data[tablename].to_sql(name = tablename, con = con)

        con.close()
```