1..Breast tumor detection assignment

```python
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
from sklearn.metrics import classification_report
from sklearn.metrics import confusion_matrix
from sklearn.metrics import accuracy_score
from sklearn.model_selection import train_test_split
from sklearn.model_selection import cross_val_score
from sklearn.model_selection import KFold
from sklearn.tree import DecisionTreeClassifier
from sklearn.neighbors import KNeighborsClassifier
from sklearn.naive_bayes import GaussianNB
from sklearn.pipeline import Pipeline
from sklearn.preprocessing import StandardScaler
from sklearn.model_selection import GridSearchCV
from sklearn.svm import SVC
import time
data = pd.read_csv('../input/data.csv', index_col=False)
data.head(5)
print(data.shape)
models_list = []
models_list.append(('CART', DecisionTreeClassifier()))
models_list.append(('SVM', SVC()))
models_list.append(('NB', GaussianNB()))
models_list.append(('KNN', KNeighborsClassifier()))
num_folds = 10
results = []
names = []

for name, model in models_list:
    kfold = KFold(n_splits=num_folds, random_state=123)
    start = time.time()
    cv_results = cross_val_score(model, X_train, Y_train, cv=kfold, scoring='accu
racy')
    end = time.time()
    results.append(cv_results)
    names.append(name)
    print( "%s: %f (%f) (run time: %f)" % (name, cv_results.mean(), cv_results.st
d(), end-start))
```