In [88]:

```
#Algorithm  accuracy
#   Random forest   0.914117
#   Random Forest Regressor k_fold  0.759055
#   Gradient Boosting Regressor 0.759055
#   Gradient Boosting Regressor k_fold  0.771037
##  Gradient Boosting Regressor 0.770836
#   Gradient Boosting Regresso k_fold0.585894
```

KNN Regressor

In [89]:

```
# checking differrnt values of neighbor to determine
from sklearn.neighbors import KNeighborsRegressor
diff_k=[]
for  i in range(1,45):
    knn=KNeighborsRegressor(n_neighbors=i)
    knn.fit(x_train,y_train)
    pred_i=knn.predict(x_test)
    diff_k.append(np.mean(pred_i!=y_test))
```

In [90]:

```
plt.figure(figsize=(12,6))
plt.plot(range(1,45),diff_k,color='blue',linestyle='dashed',marker='o',markerfacecolor=
plt.title('Differeent K value')
plt.xlabel('k values')
plt.ylabel('Mean error')
```

Out[90]:

```
Text(0, 0.5, 'Mean error')
```