```
 1 import streamlit as st
 2 import numpy as np
 3 import altair as alt
 4 import pickle
 5
 6 @st.cache
 7 def load_data():
 8     with open('data.pkl', 'rb') as f:
 9         data = pickle.load(f)
10     return data
11 data = load_data()
12 data['ZIPCODE'] = data['ZIPCODE'].apply(np.int64)
13
14 def show_page2():
15     st.markdown('<h2 style = "text-align: center;">
   Historical Prices by Zipcode</div>',
   unsafe_allow_html=True)
16
17     st.markdown('<h4 style = "text-align: center;">
   Choose one or more zipcodes to view median prices for
    houses sold</div>',
18                 unsafe_allow_html=True)
19     subset_data = data
20 #ZIPCODE using multiselect streamlit tool
21     zipcode_input = st.multiselect('Zip Code',data.
   groupby('ZIPCODE').count().reset_index()['ZIPCODE'].
   tolist())
22
23     if len(zipcode_input)>0:
24         subset_data = data[data['ZIPCODE'].isin(
   zipcode_input)]
25
26     st.markdown('<h4 style = "text-align: center;">
   Median Phoenix Home Prices by Zipcode for previous 12
    months</div>',
27                 unsafe_allow_html=True)
28
29     prices_graph = alt.Chart(subset_data).mark_point
   ().encode(
30         x=alt.X('SOLDDATE', title='Sold Date'),
31         y=alt.Y('PRICE:Q', title='Price'),
```

```
32          color = 'ZIPCODE:N',
33      ).properties(
34          width = 800,
35          height = 600
36      )
37
38      prices_line = prices_graph.transform_regression('
   SOLDDATE','PRICE').mark_line()
39      graph = prices_graph+prices_line
40      st.altair_chart(graph)
41
42      st.write(subset_data)
43
44
45
```