STREAMLIT SOURCE CODE

```
import streamlit as st
import pickle
import pandas as pd
modell = pickle.load(open(r'C:\Users\Lenovo\Desktop\jkm\model1.pkl','rb'))
model2 = pickle.load(open(r'C:\Users\Lenovo\Desktop\jkm\model2.pkl','rb'))
model3 = pickle.load(open(r'C:\Users\Lenovo\Desktop\jkm\model3.pkl','rb'))
model4 = pickle.load(open(r'C:\Users\Lenovo\Desktop\jkm\model4.pkl','rb'))
model5 = pickle.load(open(r'C:\Users\Lenovo\Desktop\jkm\model5.pkl','rb'))
model6 = pickle.load(open(r'C:\Users\Lenovo\Desktop\jkm\model6.pkl','rb'))
def main():
    st.title('Health Insurance Prediction')

    # Sidebar inputs
    st.sidebar.header('User Inputs')

    age = st.sidebar.number_input('Age', min_value=0, max_value=120, value=30)

    sex=st.sidebar.selectbox('sex',['MALE','FEMALE'])

    bmi = st.sidebar.number_input('BMI', min_value=10, max_value=50, value=25)
    children = st.sidebar.number_input('Number of Children', min_value=0, max_value=10,
value=0)
    smoker = st.sidebar.selectbox('Smoker', ['No', 'Yes'])
    region = st.sidebar.selectbox('Region', ['Northeast', 'Northwest', 'Southeast', 'Southwest'])
    charges=st.sidebar.number_input('CHARGES', min_value=1000, max_value=70000,
value=1000)
    # Convert smoker to binary (0 or 1)
    smoker = 1 if smoker == 'Yes' else 0

    # Create a DataFrame for prediction
    input_data = pd.DataFrame({
        'age': [age],
        'bmi': [bmi],
        'children': [children],
        'smoker': [smoker],
        'region': [region],
        'charges': [charges],
    })
    # Display user inputs
    st.write('User Inputs:')
    st.write(input_data)
```

```
    # Make prediction
    prediction = modell.predict(input_data)
    prediction_probability = modell.predict_proba(input_data)

    # Display prediction
    st.subheader('Prediction')
    if prediction[0] == 1:
        st.write('The user is likely to have health insurance.')
    else:
        st.write('The user is unlikely to have health insurance.')

    # Display prediction probability
    st.subheader('Prediction Probability')
    st.write(f'Probability of having health insurance: {prediction_probability[0][1]:.2f}')

if __name__ == '__main__':
    main()
```