

```
In [ ]: import pandas as pd
import numpy as np
from tkinter import *
from sklearn.tree import DecisionTreeClassifier
```

```
In [ ]: import os
os.chdir("C:\\Users\\kumar\\OneDrive\\Desktop\\Machine Learning")
df=pd.read_csv("iris (1).csv")
df
```

```
In [ ]: root=Tk()
root.title("IRIS Flower Prediction")
```

```
In [ ]: print(root)
```

```
In [ ]: Label(root,text="sepal_length",font="Times 15").grid(row=0,column=0,padx=50,pady=10)
Label(root,text="sepal_width",font="Times 15").grid(row=1,column=0,pady=10)
Label(root,text="petal_length",font="Times 15").grid(row=2,column=0,pady=10)
Label(root,text="petal_length",font="Times 15").grid(row=3,column=0,pady=10)
Label(root,text="Prediction",font="Times 20").grid(row=5,column=0,pady=10)
```

```
In [ ]: textbox=Text(root,height=3,width=20)
textbox.grid(row=5,column=1)
```

```
In [ ]: input_text=StringVar()
input_text1=StringVar()
input_text2=StringVar()
input_text3=StringVar()
result=StringVar()
```

```
In [ ]: e1=Entry(root,font=1,textvariable=input_text)
e1.grid(row=0,column=1)
e2=Entry(root,font=1,textvariable=input_text1)
e2.grid(row=1,column=1)
e3=Entry(root,font=1,textvariable=input_text2)
e3.grid(row=2,column=1)
e4=Entry(root,font=1,textvariable=input_text3)
e4.grid(row=3,column=1)
```

```
In [ ]: def entryClear():
    input_text.set("")
    input_text1.set("")
    input_text2.set("")
    input_text3.set("")
    result.set("")
    textbox.delete(1.0,END)
```

```
In [ ]: def getpredict():
    lst = [float(e1.get()), float(e2.get()), float(e3.get()), float(e4.get())]
    eg = np.array(lst).reshape(1, -1)

    x = df.iloc[:, :4].values
    y = df.iloc[:, 4:5].values

    model = DecisionTreeClassifier()
    model.fit(x, y)

    predict = model.predict(eg)
    textbox.insert(END, predict)
```

```
In [ ]: Button(root,text='Clear',font=10,width=8,bg="#9B0000",fg="white",command=entryClear)
        Button(root,text='Predict',font=10,width=8,bg="#39FD03",fg="white",command=getpred:
root.mainloop()
```