In [16]:
```
#Iris data set Project

import pandas as pd
from sklearn.neighbors import KNeighborsClassifier

df=pd.read_csv("iris.csv")
df.head()

features=df.iloc[:,:-1].values
target=df.iloc[:,-1:].values
knc=KNeighborsClassifier()
knc.fit(features,target)
```

```
C:\Users\rahul\anaconda3\Lib\site-packages\sklearn\neighbors\_classification.py:238: DataConversionWarning: A co
lumn-vector y was passed when a 1d array was expected. Please change the shape of y to (n_samples,), for example
using ravel().
  return self._fit(X, y)
```

Out[16]:

KNeighborsClassifier

KNeighborsClassifier()

In [7]:
```
def iris():
    sepallength=float(sl_entry.get())
    sepalwidth=float(sw_entry.get())
    petallength=float(pl_entry.get())
    petalwidth=float(pw_entry.get())
    prediction=knc.predict([[sepallength,sepalwidth,petallength,petalwidth]])
    #print(prediction)
    r_entry.delete(0,END)
    r_entry.insert(0,prediction[0])

def clearit():
    r_entry.delete(0,END)
    sl_entry.delete(0,END)
    sw_entry.delete(0,END)
    pl_entry.delete(0,END)
    pw_entry.delete(0,END)

#making frontend usinf ttkinter

from tkinter import *
win=Tk()
win.state("zoomed")
win.title("Iris Prediction Program")
win.configure(bg="magenta")
header=Frame(win)
header.configure(bg="pink")
header.place(x=0,y=0,relwidth=1,relheight=0.20)
title = Label(header,text = " Iris Prediction System ",font=('Verdana',40,'bold'))
title.pack()
body=Frame(win)
body.configure(bg="pink")
body.place(x=0,y=200,relwidth=1,relheight=0.80)

sepallength=Label(body,text="Sepal Length",font=("Verdana",20),bg="ghostwhite")
sepallength.place(relx=0.2,rely=0.1)

sepalwidth=Label(body,text="Sepal Width",font=("Verdana",20),bg="ghostwhite")
sepalwidth.place(relx=0.2,rely=0.25)

petallength=Label(body,text="Petal Length",font=("Verdana",20),bg="ghostwhite")
petallength.place(relx=0.2,rely=0.40)

petalwidth=Label(body,text="Petal Width",font=("Verdana",20),bg="ghostwhite")
petalwidth.place(relx=0.2,rely=0.55)

Result=Label(body,text="Result",font=("Verdana",20),bg="pink")
Result.place(relx=0.2,rely=0.67)

sl_entry=Entry(body,font=("Verdana",20),bd=4)
sl_entry.place(relx=0.4,rely=0.10)

sw_entry=Entry(body,font=("Verdana",20),bd=4)
sw_entry.place(relx=0.4,rely=0.25)

pl_entry=Entry(body,font=("Verdana",20),bd=4)
pl_entry.place(relx=0.4,rely=0.40)

pw_entry=Entry(body,font=("Verdana",20),bd=4)
pw_entry.place(relx=0.4,rely=0.55)
```

```
r_entry=Entry(body,font=("Verdana",20),bd=2)
r_entry.place(relx=0.4,rely=0.67)

Predict=Button(body,text="Iris Prediction",font=("Verdana",20),bd=4,command=iris)
Predict.place(relx=0.4,rely=0.80)

Clear=Button(body,text="Clear",font=("Verdana",20),bd=4,command=clearit)
Clear.place(relx=0.6,rely=0.80)

win.mainloop()
```

In [ ]: