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"df=pd.read\_csv(url)\n",

"x=df['Amplitude']\n",

"y=df['Duration']\n",

"classes=df['Label'].map({'Sine':0,'Square':1})\n",

"data=list(zip(x,y))\n",

"knn=KNeighborsClassifier(n\_neighbors=1)\n",

"knn.fit(data,classes)\n",

"newx=2.3\n",

"newy=1\n",

"newp=[(newx,newy)]\n",

"prediction=knn.predict(newp)\n",

"plt.scatter(x,y,c=classes,cmap='coolwarm')\n",

"pc='red' if prediction[0]==1 else 'blue'\n",

"plt.scatter(newx,newy,c=pc,marker='x')\n",

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"x=df['Voltage (V)']\n",

"y=df['Current(A)']\n",

"classes=df['Status'].map({'Defective':0,'Working':1})\n",

"d=list(zip(x,y))\n",

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"knn.fit(d,classes)\n",

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"x=df['Study Hours']\n",

"y=df['Final Exam Score']\n",

"slope,intercept,r,p,std\_err=stats.linregress(x,y)\n",

"def myfun(x):\n",

" return slope\*x+intercept\n",

"mymodel=list(map(myfun,x))\n",

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"plt.plot(x,mymodel,color='blue',label='Line Regression')\n",

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"x=df['Year']\n",

"y=df['Price']\n",

"slope,intercept,r,p,std\_err=stats.linregress(x,y)\n",

"def myfun(x):\n",

" return slope\*x+intercept\n",

"mymodel=list(map(myfun,x))\n",

"plt.scatter(x,y,color='red',label='Actual Prices')\n",

"plt.plot(x,mymodel,color='blue',label='Line Regression')\n",

"plt.scatter(2020,myfun(2020),color='green',label='Predicted Price')\n",

"plt.legend()\n",

"plt.title('Price Prediction')\n",

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"features=['Transmitter','Signal Strength','Frequency']\n",

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"d=list(zip(x,y))\n",

"kmeans=KMeans(n\_clusters=2)\n",

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