NAME: Samaya. S

CLASS: 4th year ECE

SUBJECT: IBM

REGISTER NO: 611419106049

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"2419 F 0.465 0.360 0.120 0.4765 0.1920 \n",

"3288 F 0.605 0.475 0.145 1.0185 0.4695 \n",

"503 F 0.600 0.505 0.190 1.1290 0.4385 \n",

"798 M 0.520 0.420 0.160 0.7450 0.2550 \n",

"3881 F 0.565 0.455 0.130 1.0580 0.4390 \n",

"1234 I 0.375 0.290 0.095 0.2130 0.0960 \n",

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"\n",

" Viscera weight Shell weight Rings \n",

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"matplotlib.rcParams['figure.figsize']=(11,6)\n",

"df=pd.read\_csv(\"/Users/ELCOT/Desktop/Assignment\_3/abalone.csv\")\n",

"df.sample(10)"

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"1 M 0.350 0.265 0.090 0.2255 0.0995 0.0485 \n",

"2 F 0.530 0.420 0.135 0.6770 0.2565 0.1415 \n",

"3 M 0.440 0.365 0.125 0.5160 0.2155 0.1140 \n",

"4 I 0.330 0.255 0.080 0.2050 0.0895 0.0395 \n",

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"import pandas as pd\n",

"import numpy as np\n",

"headers=['Sex','Length','Diameter','Height','Whole weight','Shucked weight','Viscera weight','Shell weight','Rings']\n",

"import seaborn as sns\n",

"df.head()"

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"print(x)\n",

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"# 9. Scale the independent variables"

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"import seaborn as sns\n",

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

"dff=df[['Length','Height']]\n",

"sns.heatmap(dff.corr(), annot=True)\n",

"sns.set(rc={'figure.figsize':(40,40)})"

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"from scipy.sparse.construct import random\n",

"x=df.iloc[:, 1:2].values\n",

"y=df.iloc[:,2].values\n",

"from sklearn.model\_selection import train\_test\_split\n",

"x\_train, x\_test, y\_train, y\_test=train\_test\_split(x,y,test\_size=0.2,random\_state=0)\n",

"print('Row count of x\_train table'+'-'+str(f\"{len(x\_train):,}\"))\n",

"print('Row count of y\_train table'+'-'+str(f\"{len(y\_train):,}\"))\n",

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"model=LinearRegression()"

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"# 12. Train the Model"

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"model.fit(x\_train,y\_train)"

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"# 13. Test the Model"

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