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    "import numpy as np\n",
    "import seaborn as sns\n",
    "import matplotlib.pyplot as plt\n",
    "from sklearn.preprocessing import LabelEncoder \n",
    "from sklearn.model_selection import train_test_split\n",
    "from sklearn.linear_model import LogisticRegression\n",
    "from sklearn.neighbors import KNeighborsClassifier\n",
    "from sklearn.tree import DecisionTreeClassifier"
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"    <td>Iris-setosa</td>\n",
"  </tr>\n",
"  <tr>\n",
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   "--- ------   -------------- ----- \n",

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   " 1   sepal_width   150 non-null   float64\n",

   " 2   petal_length 150 non-null   float64\n",

   " 3   petal_width   150 non-null   float64\n",

   " 4   species   150 non-null   object \n",

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    "      <td>1.198667</td>\n",
    "    </tr>\n",
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    "      <td>0.763161</td>\n",
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"   <td>1.198667</td>\n",

"   </tr>\n",

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"    <tr>\n",
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"      <td>1.000000</td>\n",
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    "25%     5.100000    2.800000     1.600000    0.300000\n",
    "50%     5.800000    3.000000     4.350000    1.300000\n",
    "75%     6.400000    3.300000     5.100000    1.800000\n",
    "max     7.900000    4.400000     6.900000    2.500000"
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On GitHub, the HTML representation is unable to render, please try loading this page with nbviewer.org.</div><div class=\"sk-container\" hidden><div class=\"sk-item\"><div class=\"sk-estimator sk-toggleable\"><input class=\"sk-toggleable__control sk-hidden--visually\" id=\"sk-estimator-id-4\" type=\"checkbox\" checked><label for=\"sk-estimator-id-4\" class=\"sk-toggleable__label sk-toggleable__label-arrow\">LogisticRegression</label><div class=\"sk-toggleable__content\"><pre>LogisticRegression()</pre></div></div></div></div></div>"
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On GitHub, the HTML representation is unable to render, please try loading this page with nbviewer.org.</div><div class=\"sk-container\" hidden><div class=\"sk-item\"><div class=\"sk-estimator sk-toggleable\"><input class=\"sk-toggleable__control sk-hidden--visually\" id=\"sk-estimator-id-5\" type=\"checkbox\" checked><label for=\"sk-estimator-id-5\" class=\"sk-toggleable__label sk-toggleable__label-arrow\">KNeighborsClassifier</label><div class=\"sk-toggleable__content\"><pre>KNeighborsClassifier()</pre></div></div></div></div></div>"
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```

toggleable__label-arrow:before {color: black;}#sk-container-id-6 div.sk-toggleable__content {max-height: 0;max-width: 0;overflow: hidden;text-align: left;background-color: #f0f8ff;}#sk-container-id-6 div.sk-toggleable__content pre {margin: 0.2em;color: black;border-radius: 0.25em;background-color: #f0f8ff;}#sk-container-id-6 input.sk-toggleable__control:checked~div.sk-toggleable__content {max-height: 200px;max-width: 100%;overflow: auto;}#sk-container-id-6 input.sk-toggleable__control:checked~label.sk-toggleable__label-arrow:before {content: \" ▾ \";}#sk-container-id-6 div.sk-estimator input.sk-toggleable__control:checked~label.sk-toggleable__label {background-color: #d4ebff;}#sk-container-id-6 div.sk-label input.sk-toggleable__control:checked~label.sk-toggleable__label {background-color: #d4ebff;}#sk-container-id-6 input.sk-hidden--visually {border: 0;clip: rect(1px 1px 1px 1px);clip: rect(1px, 1px, 1px, 1px);height: 1px;margin: -1px;overflow: hidden;padding: 0;position: absolute;width: 1px;}#sk-container-id-6 div.sk-estimator {font-family: monospace;background-color: #f0f8ff;border: 1px dotted black;border-radius: 0.25em;box-sizing: border-box;margin-bottom: 0.5em;}#sk-container-id-6 div.sk-estimator:hover {background-color: #d4ebff;}#sk-container-id-6 div.sk-parallel-item::after {content: \"\";width: 100%;border-bottom: 1px solid gray;flex-grow: 1;}#sk-container-id-6 div.sk-label:hover label.sk-toggleable__label {background-color: #d4ebff;}#sk-container-id-6 div.sk-serial::before {content: \"\";position: absolute;border-left: 1px solid gray;box-sizing: border-box;top: 0;bottom: 0;left: 50%;z-index: 0;}#sk-container-id-6 div.sk-serial {display: flex;flex-direction: column;align-items: center;background-color: white;padding-right: 0.2em;padding-left: 0.2em;position: relative;}#sk-container-id-6 div.sk-item {position: relative;z-index: 1;}#sk-container-id-6 div.sk-parallel {display: flex;align-items: stretch;justify-content: center;background-color: white;position: relative;}#sk-container-id-6 div.sk-item::before, #sk-container-id-6 div.sk-parallel-item::before {content: \"\";position: absolute;border-left: 1px solid gray;box-sizing: border-box;top: 0;bottom: 0;left: 50%;z-index: -1;}#sk-container-id-6 div.sk-parallel-item {display: flex;flex-direction: column;z-index: 1;position: relative;background-color: white;}#sk-container-id-6 div.sk-parallel-item:first-child::after {align-self: flex-end;width: 50%;}#sk-container-id-6 div.sk-parallel-item:last-child::after {align-self: flex-start;width: 50%;}#sk-container-id-6 div.sk-parallel-item:only-child::after {width: 0;}#sk-container-id-6 div.sk-dashed-wrapped {border: 1px dashed gray;margin: 0 0.4em 0.5em 0.4em;box-sizing: border-box;padding-bottom: 0.4em;background-color: white;}#sk-container-id-6 div.sk-label label {font-family: monospace;font-weight: bold;display: inline-block;line-height: 1.2em;}#sk-container-id-6 div.sk-label-container {text-align: center;}#sk-container-id-6 div.sk-container {/* jupyter's `normalize.less` sets `[hidden] { display: none; }` but bootstrap.min.css set `[hidden] { display: none !important; }` so we also need the `!important` here to be able to override the default hidden behavior on the sphinx rendered scikit-learn.org. See: https://github.com/scikit-learn/scikit-learn/issues/21755 */display: inline-block !important;position: relative;}#sk-container-id-6 div.sk-text-repr-fallback {display: none;}</style><div id=\"sk-container-id-6\" class=\"sk-top-container\"><div class=\"sk-text-repr-fallback\"><pre>DecisionTreeClassifier()</pre>In a Jupyter environment, please rerun this cell to show the HTML representation or trust the notebook.
On GitHub, the HTML representation is unable to render, please try loading this page with nbviewer.org.</div><div class=\"sk-container\" hidden><div class=\"sk-item\"><div class=\"sk-estimator sk-toggleable\"><input class=\"sk-toggleable__control sk-hidden--visually\" id=\"sk-estimator-id-6\" type=\"checkbox\" checked><label for=\"sk-estimator-id-6\" class=\"sk-toggleable__label sk-toggleable__label-arrow\">DecisionTreeClassifier</label><div class=\"sk-toggleable__content\"><pre>DecisionTreeClassifier()</pre></div></div></div></div></div>"

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```json
      "DecisionTreeClassifier()"
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  "source": [
   "DT.fit(x_train,y_train)"
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  "outputs": [],
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   "LR_accuracy=LR.score(x_test,y_test)*100\n",
   "KNN_accuracy=KNN.score(x_test,y_test)*100\n",
   "DT_accuracy=DT.score(x_test,y_test)*100"
  ]
 },
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         "Accuracy by using Decision Tree Classifier: 93.33333333333333%\n"

        ]

       }

      ],

      "source": [

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      ]

     }

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