{

"nbformat": 4,

"nbformat\_minor": 0,

"metadata": {

"colab": {

"provenance": []

},

"kernelspec": {

"name": "python3",

"display\_name": "Python 3"

},

"language\_info": {

"name": "python"

}

},

"cells": [

{

"cell\_type": "code",

"execution\_count": null,

"metadata": {

"id": "tUTrHVcHHh68"

},

"outputs": [],

"source": []

},

{

"cell\_type": "markdown",

"source": [

"#\*\*STATISTICS TASK\*\*"

],

"metadata": {

"id": "edspUEHjH7PE"

}

},

{

"cell\_type": "markdown",

"source": [

"\*\*DESCRIPTIVE STATISTICS\*\*"

],

"metadata": {

"id": "wVp5lo3jH95O"

}

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"import pandas as pd\n",

"import matplotlib.pyplot as plt\n",

"import seaborn as sns"

],

"metadata": {

"id": "jXB-WQI-H77G"

},

"execution\_count": 1,

"outputs": []

},

{

"cell\_type": "code",

"source": [

"data=pd.read\_csv(\"/content/SOCR-HeightWeight.csv\")"

],

"metadata": {

"id": "c\_OEeAzzI4Ck"

},

"execution\_count": 2,

"outputs": []

},

{

"cell\_type": "code",

"source": [

"data.info()\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "7U3bfPUSJNNF",

"outputId": "1d77505c-99fc-4397-d488-459dd92faba3"

},

"execution\_count": 3,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"<class 'pandas.core.frame.DataFrame'>\n",

"RangeIndex: 25000 entries, 0 to 24999\n",

"Data columns (total 3 columns):\n",

" # Column Non-Null Count Dtype \n",

"--- ------ -------------- ----- \n",

" 0 Index 25000 non-null int64 \n",

" 1 Height(Inches) 25000 non-null float64\n",

" 2 Weight(Pounds) 25000 non-null float64\n",

"dtypes: float64(2), int64(1)\n",

"memory usage: 586.1 KB\n"

]

}

]

},

{

"cell\_type": "code",

"source": [

"data.head()"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/",

"height": 804

},

"id": "5EP4T6HwJRKP",

"outputId": "20572dcf-a1f8-4d55-8db1-0e6258730912"

},

"execution\_count": 4,

"outputs": [

{

"output\_type": "execute\_result",

"data": {

"text/plain": [

" Index Height(Inches) Weight(Pounds)\n",

"0 1 65.78331 112.9925\n",

"1 2 71.51521 136.4873\n",

"2 3 69.39874 153.0269\n",

"3 4 68.21660 142.3354\n",

"4 5 67.78781 144.2971"

],

"text/html": [

"\n",

" <div id=\"df-3a16d960-0319-438b-b7de-5b8e86c2dcd9\" class=\"colab-df-container\">\n",

" <div>\n",

"<style scoped>\n",

" .dataframe tbody tr th:only-of-type {\n",

" vertical-align: middle;\n",

" }\n",

"\n",

" .dataframe tbody tr th {\n",

" vertical-align: top;\n",

" }\n",

"\n",

" .dataframe thead th {\n",

" text-align: right;\n",

" }\n",

"</style>\n",

"<table border=\"1\" class=\"dataframe\">\n",

" <thead>\n",

" <tr style=\"text-align: right;\">\n",

" <th></th>\n",

" <th>Index</th>\n",

" <th>Height(Inches)</th>\n",

" <th>Weight(Pounds)</th>\n",

" </tr>\n",

" </thead>\n",

" <tbody>\n",

" <tr>\n",

" <th>0</th>\n",

" <td>1</td>\n",

" <td>65.78331</td>\n",

" <td>112.9925</td>\n",

" </tr>\n",

" <tr>\n",

" <th>1</th>\n",

" <td>2</td>\n",

" <td>71.51521</td>\n",

" <td>136.4873</td>\n",

" </tr>\n",

" <tr>\n",

" <th>2</th>\n",

" <td>3</td>\n",

" <td>69.39874</td>\n",

" <td>153.0269</td>\n",

" </tr>\n",

" <tr>\n",

" <th>3</th>\n",

" <td>4</td>\n",

" <td>68.21660</td>\n",

" <td>142.3354</td>\n",

" </tr>\n",

" <tr>\n",

" <th>4</th>\n",

" <td>5</td>\n",

" <td>67.78781</td>\n",

" <td>144.2971</td>\n",

" </tr>\n",

" </tbody>\n",

"</table>\n",

"</div>\n",

" <div class=\"colab-df-buttons\">\n",

"\n",

" <div class=\"colab-df-container\">\n",

" <button class=\"colab-df-convert\" onclick=\"convertToInteractive('df-3a16d960-0319-438b-b7de-5b8e86c2dcd9')\"\n",

" title=\"Convert this dataframe to an interactive table.\"\n",

" style=\"display:none;\">\n",

"\n",

" <svg xmlns=\"http://www.w3.org/2000/svg\" height=\"24px\" viewBox=\"0 -960 960 960\">\n",

" <path d=\"M120-120v-720h720v720H120Zm60-500h600v-160H180v160Zm220 220h160v-160H400v160Zm0 220h160v-160H400v160ZM180-400h160v-160H180v160Zm440 0h160v-160H620v160ZM180-180h160v-160H180v160Zm440 0h160v-160H620v160Z\"/>\n",

" </svg>\n",

" </button>\n",

"\n",

" <style>\n",

" .colab-df-container {\n",

" display:flex;\n",

" gap: 12px;\n",

" }\n",

"\n",

" .colab-df-convert {\n",

" background-color: #E8F0FE;\n",

" border: none;\n",

" border-radius: 50%;\n",

" cursor: pointer;\n",

" display: none;\n",

" fill: #1967D2;\n",

" height: 32px;\n",

" padding: 0 0 0 0;\n",

" width: 32px;\n",

" }\n",

"\n",

" .colab-df-convert:hover {\n",

" background-color: #E2EBFA;\n",

" box-shadow: 0px 1px 2px rgba(60, 64, 67, 0.3), 0px 1px 3px 1px rgba(60, 64, 67, 0.15);\n",

" fill: #174EA6;\n",

" }\n",

"\n",

" .colab-df-buttons div {\n",

" margin-bottom: 4px;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-convert {\n",

" background-color: #3B4455;\n",

" fill: #D2E3FC;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-convert:hover {\n",

" background-color: #434B5C;\n",

" box-shadow: 0px 1px 3px 1px rgba(0, 0, 0, 0.15);\n",

" filter: drop-shadow(0px 1px 2px rgba(0, 0, 0, 0.3));\n",

" fill: #FFFFFF;\n",

" }\n",

" </style>\n",

"\n",

" <script>\n",

" const buttonEl =\n",

" document.querySelector('#df-3a16d960-0319-438b-b7de-5b8e86c2dcd9 button.colab-df-convert');\n",

" buttonEl.style.display =\n",

" google.colab.kernel.accessAllowed ? 'block' : 'none';\n",

"\n",

" async function convertToInteractive(key) {\n",

" const element = document.querySelector('#df-3a16d960-0319-438b-b7de-5b8e86c2dcd9');\n",

" const dataTable =\n",

" await google.colab.kernel.invokeFunction('convertToInteractive',\n",

" [key], {});\n",

" if (!dataTable) return;\n",

"\n",

" const docLinkHtml = 'Like what you see? Visit the ' +\n",

" '<a target=\"\_blank\" href=https://colab.research.google.com/notebooks/data\_table.ipynb>data table notebook</a>'\n",

" + ' to learn more about interactive tables.';\n",

" element.innerHTML = '';\n",

" dataTable['output\_type'] = 'display\_data';\n",

" await google.colab.output.renderOutput(dataTable, element);\n",

" const docLink = document.createElement('div');\n",

" docLink.innerHTML = docLinkHtml;\n",

" element.appendChild(docLink);\n",

" }\n",

" </script>\n",

" </div>\n",

"\n",

"\n",

"<div id=\"df-415a70e4-c7eb-4e46-a132-6e25ce808d83\">\n",

" <button class=\"colab-df-quickchart\" onclick=\"quickchart('df-415a70e4-c7eb-4e46-a132-6e25ce808d83')\"\n",

" title=\"Suggest charts\"\n",

" style=\"display:none;\">\n",

"\n",

"<svg xmlns=\"http://www.w3.org/2000/svg\" height=\"24px\"viewBox=\"0 0 24 24\"\n",

" width=\"24px\">\n",

" <g>\n",

" <path d=\"M19 3H5c-1.1 0-2 .9-2 2v14c0 1.1.9 2 2 2h14c1.1 0 2-.9 2-2V5c0-1.1-.9-2-2-2zM9 17H7v-7h2v7zm4 0h-2V7h2v10zm4 0h-2v-4h2v4z\"/>\n",

" </g>\n",

"</svg>\n",

" </button>\n",

"\n",

"<style>\n",

" .colab-df-quickchart {\n",

" --bg-color: #E8F0FE;\n",

" --fill-color: #1967D2;\n",

" --hover-bg-color: #E2EBFA;\n",

" --hover-fill-color: #174EA6;\n",

" --disabled-fill-color: #AAA;\n",

" --disabled-bg-color: #DDD;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-quickchart {\n",

" --bg-color: #3B4455;\n",

" --fill-color: #D2E3FC;\n",

" --hover-bg-color: #434B5C;\n",

" --hover-fill-color: #FFFFFF;\n",

" --disabled-bg-color: #3B4455;\n",

" --disabled-fill-color: #666;\n",

" }\n",

"\n",

" .colab-df-quickchart {\n",

" background-color: var(--bg-color);\n",

" border: none;\n",

" border-radius: 50%;\n",

" cursor: pointer;\n",

" display: none;\n",

" fill: var(--fill-color);\n",

" height: 32px;\n",

" padding: 0;\n",

" width: 32px;\n",

" }\n",

"\n",

" .colab-df-quickchart:hover {\n",

" background-color: var(--hover-bg-color);\n",

" box-shadow: 0 1px 2px rgba(60, 64, 67, 0.3), 0 1px 3px 1px rgba(60, 64, 67, 0.15);\n",

" fill: var(--button-hover-fill-color);\n",

" }\n",

"\n",

" .colab-df-quickchart-complete:disabled,\n",

" .colab-df-quickchart-complete:disabled:hover {\n",

" background-color: var(--disabled-bg-color);\n",

" fill: var(--disabled-fill-color);\n",

" box-shadow: none;\n",

" }\n",

"\n",

" .colab-df-spinner {\n",

" border: 2px solid var(--fill-color);\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" animation:\n",

" spin 1s steps(1) infinite;\n",

" }\n",

"\n",

" @keyframes spin {\n",

" 0% {\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" border-left-color: var(--fill-color);\n",

" }\n",

" 20% {\n",

" border-color: transparent;\n",

" border-left-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" }\n",

" 30% {\n",

" border-color: transparent;\n",

" border-left-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" border-right-color: var(--fill-color);\n",

" }\n",

" 40% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" }\n",

" 60% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" }\n",

" 80% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" border-bottom-color: var(--fill-color);\n",

" }\n",

" 90% {\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" }\n",

" }\n",

"</style>\n",

"\n",

" <script>\n",

" async function quickchart(key) {\n",

" const quickchartButtonEl =\n",

" document.querySelector('#' + key + ' button');\n",

" quickchartButtonEl.disabled = true; // To prevent multiple clicks.\n",

" quickchartButtonEl.classList.add('colab-df-spinner');\n",

" try {\n",

" const charts = await google.colab.kernel.invokeFunction(\n",

" 'suggestCharts', [key], {});\n",

" } catch (error) {\n",

" console.error('Error during call to suggestCharts:', error);\n",

" }\n",

" quickchartButtonEl.classList.remove('colab-df-spinner');\n",

" quickchartButtonEl.classList.add('colab-df-quickchart-complete');\n",

" }\n",

" (() => {\n",

" let quickchartButtonEl =\n",

" document.querySelector('#df-415a70e4-c7eb-4e46-a132-6e25ce808d83 button');\n",

" quickchartButtonEl.style.display =\n",

" google.colab.kernel.accessAllowed ? 'block' : 'none';\n",

" })();\n",

" </script>\n",

"</div>\n",

"\n",

" </div>\n",

" </div>\n"

],

"application/vnd.google.colaboratory.intrinsic+json": {

"type": "dataframe",

"variable\_name": "data",

"summary": "{\n \"name\": \"data\",\n \"rows\": 25000,\n \"fields\": [\n {\n \"column\": \"Index\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 7217,\n \"min\": 1,\n \"max\": 25000,\n \"num\_unique\_values\": 25000,\n \"samples\": [\n 6869,\n 24017,\n 9669\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n },\n {\n \"column\": \"Height(Inches)\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 1.9016787712056105,\n \"min\": 60.27836,\n \"max\": 75.1528,\n \"num\_unique\_values\": 24503,\n \"samples\": [\n 70.54119,\n 69.18567,\n 72.07371\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n },\n {\n \"column\": \"Weight(Pounds)\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 11.660897563604278,\n \"min\": 78.01476,\n \"max\": 170.924,\n \"num\_unique\_values\": 24248,\n \"samples\": [\n 120.2499,\n 120.2753,\n 122.6824\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n }\n ]\n}"

}

},

"metadata": {},

"execution\_count": 4

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x786710c684c0>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">Distributions</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_0['Index'].plot(kind='hist', bins=20, title='Index')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-ea6ca493-a353-477e-a72e-3a81a92120c2\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAgHElEQVR4nO3de3BU9f3/8deS4HopSeSSISUsaRISQEhiMCkNeB9b5YsBAa20\n",

"aCLmItBBBx0oIqNQS+i0tlIcJRiaihlFh4Bk8DZVo6KCEEWKQIUAYQNGwohksUIgm/P7g2F/bEMw\n",

"G3Kynw3Px8zOZDcfD+/Pdz31+d097Dosy7IEAABgoG7BHgAAAKA1hAoAADAWoQIAAIxFqAAAAGMR\n",

"KgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAGNNnjxZubm5wR4DQBARKgBsc8MNN+ixxx4L\n",

"9hgAQhihAgAAjEWoAOgUcXFxWrBggUaPHq0ePXooISFBa9as8Vvz5z//WS6XS1FRUcrLy9PJkyf9\n",

"fn/06FFNnTpVAwYMUK9evTR69Gjt3btXkrRz505FRERo7dq1vvVTp07VNddco8bGRvs3CMAWhAqA\n",

"TlNSUqInn3xSDQ0Nmj59unJycuTxeCRJL730khYuXKiVK1fq8OHDyszM9AsZy7J0xx13yOPxaMuW\n",

"Lfr66681bNgwjRkzRqdOndLgwYO1fPly5eTkqLq6Wi+++KJeffVVrVq1Sk6nM1hbBnCBCBUAnSYv\n",

"L0/p6enq1q2bCgsLdezYMe3cuVOSVFpaqilTpigrK0vdu3dXQUGBUlJSfP/sli1b9PHHH6u4uFg9\n",

"e/aU0+nUwoULtW/fPn366aeSpDvvvFP333+/xowZo2nTpqmsrExxcXHB2CqADkKoAOg0P/3pT30/\n",

"X3HFFZKkY8eOSZIOHDign/3sZ37rz76/e/duNTU1KTY2VlFRUYqKilKvXr0kSbW1tb51Dz74oKqr\n",

"qzVs2DDddttttu0FQOcgVAAYITY2VjU1NX6PnX2/b9++uuSSS3T48GEdPXrUdzt+/LgmTZokSTp1\n",

"6pQmTZqkCRMmqKamRs8880wn7gCAHQgVAEbIycnRP/7xD23cuFFNTU0qKSnR1q1bfb8fNWqUhg4d\n",

"qqlTp6q+vl6S9N1336m8vFw//PCDJOmRRx7R8ePH9cILL+iVV17R7NmzfW8LAQhNhAoAI/z2t7/V\n",

"rFmzdOedd6p3797auHGj7rjjDt/vw8LC9K9//UuXX365fv7zn6tHjx5KTU3VmjVr5HA4tHLlSpWV\n",

"lam8vFyXXnqprr32Wi1YsEATJ07U4cOHg7gzABfCYVmWFewhAAAAzoVXVAAAgLEIFQAAYCxCBQAA\n",

"GItQAQAAxiJUAACAsQgVAABgLEIFAAAYq0uEyuLFi4M9AgAAsEGXCJX9+/cHewQAAGCDLhEqAACg\n",

"ayJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAA\n",

"YCxCBQAAGMvWUJkxY4bi4uLkcDj0xRdftLpu+fLlGjhwoBISEpSfn69Tp07ZORYAAAgRtobKxIkT\n",

"9dFHH2nAgAGtrtm3b5/mzZun9evXq7q6WocOHdKyZcvsHAsAAIQIW0PluuuuU2xs7HnXrFq1StnZ\n",

"2erbt68cDoceeOABvfzyy62ub2xslMfj8bt5vd6OHh0AABggPNgDuN1uv1dc4uLi5Ha7W11fVFSk\n",

"+fPn+z02YsQIW2aL+/3rthxXkmoW/Z9tx8b/x3MY+ux6Dnn+Og/PYefoqv93DrmLaefMmaOGhga/\n",

"W2ZmZrDHAgAANgj6Kyoul0t79uzx3a+pqZHL5Wp1vdPplNPp9HssLCzMtvkAAEDwBP0VlQkTJqii\n",

"okLffPONLMvS0qVLdffddwd7LAAAYABbQ6WwsFCxsbE6cOCAfvWrXykxMVGSlJeXp4qKCklSfHy8\n",

"5s+fr5EjRyoxMVF9+vRRYWGhnWMBAIAQYetbP8XFxed8vKSkxO9+fn6+8vPz7RwFAACEoKC/9QMA\n",

"ANAaQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1AB\n",

"AADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgV\n",

"AABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQ\n",

"AQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEI\n",

"FQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiL\n",

"UAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICx\n",

"CBUAAGAsW0Nl9+7dysrKUlJSkjIyMrR9+/YWa5qbmzVz5kwNGTJEKSkpuvHGG1VdXW3nWAAAIETY\n",

"GiqFhYUqKCjQrl27NHv2bOXm5rZYU1FRoY8//lhbt27Vv//9b91888169NFH7RwLAACECNtCpb6+\n",

"XlVVVZo8ebIkacKECaqtrW3xaonD4VBjY6NOnDghy7Lk8XgUGxtr11gAACCEhNt14NraWsXExCg8\n",

"/PQf4XA45HK55Ha7lZiY6Ft3++23q7KyUn379lWPHj3Ur18/ffDBB60et7GxUY2NjX6Peb1eezYB\n",

"AACCKugX01ZVVenLL7/UwYMH9fXXX+vmm2/WAw880Or6oqIiRUZG+t02bdrUiRMDAIDOYluo9O/f\n",

"X3V1dWpqapIkWZYlt9stl8vlt27FihW66aabFBUVpW7duiknJ0eVlZWtHnfOnDlqaGjwu2VmZtq1\n",

"DQAAEES2hUp0dLTS09NVVlYmSSovL1dsbKzf2z6SFB8fr/fee08nT56UJK1bt05Dhw5t9bhOp1MR\n",

"ERF+t7CwMLu2AQAAgsi2a1Qkqbi4WLm5uVq4cKEiIiJUWloqScrLy1N2drays7M1ffp07dy5U6mp\n",

"qerevbv69u2rpUuX2jkWAAAIEbaGSnJysjZs2NDi8ZKSEt/PTqdTzz//vJ1jAACAEBX0i2kBAABa\n",

"Q6gAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADA\n",

"WIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAA\n",

"jEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAA\n",

"wFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIA\n",

"AIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoA\n",

"AMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqEC\n",

"AACMRagAAABj2Roqu3fvVlZWlpKSkpSRkaHt27efc922bdt0ww03aPDgwRo8eLBWr15t51gAACBE\n",

"hNt58MLCQhUUFCg3N1erVq1Sbm6uNm/e7Lfmhx9+0NixY7VixQqNGjVKXq9XR44csXMsAAAQImx7\n",

"RaW+vl5VVVWaPHmyJGnChAmqra1VdXW137qXXnpJI0aM0KhRoyRJYWFh6tOnT6vHbWxslMfj8bt5\n",

"vV67tgEAAILItlCpra1VTEyMwsNPv2jjcDjkcrnkdrv91u3YsUNOp1NjxoxRWlqa7r33Xh0+fLjV\n",

"4xYVFSkyMtLvtmnTJru2AQAAgijgUHn77bc7dICmpia98847Ki4u1pYtW9SvXz9NnTq11fVz5sxR\n",

"Q0OD3y0zM7NDZwIAAGYIOFQWLFig5ORkLV68WB6Pp9V1/fv3V11dnZqamiRJlmXJ7XbL5XL5rXO5\n",

"XLrxxhvVr18/ORwOTZ48WRs3bmz1uE6nUxEREX63sLCwQLcBAABCQMCh8vHHH2vlypX68ssvlZSU\n",

"pGnTpmnHjh0t1kVHRys9PV1lZWWSpPLycsXGxioxMdFv3V133aXNmzf7oueNN95Qampqe/YCAAC6\n",

"mHZdo3L11Vfr+eef11tvvaV169YpJSVFt9xyi7Zt2+a3rri4WMXFxUpKStKiRYtUWloqScrLy1NF\n",

"RYWk06+oPProo8rKylJKSoree+89LV269AK3BQAAuoJ2/fXkd955R0uWLNG2bds0ffp03X///Xr/\n",

"/fd1xx13+P2tnuTkZG3YsKHFP19SUuJ3/5577tE999zTnlEAAEAXFnCoDB48WL1799aMGTM0fvx4\n",

"3/UhEydO1PLlyzt8QAAAcPEKOFTKyso0fPjwc/7uzTffvOCBAAAAzgj4GpXPPvvM75Njv/32Wz3/\n",

"/PMdOhQAAIDUjlB59tln1bNnT9/9Xr166dlnn+3QoQAAAKR2hIplWS0e4yPsAQCAHQIOlZiYGL36\n",

"6qu++6+88opiYmI6dCgAAACpHRfTPv300xo7dqxmzZolSbr88su1du3aDh8MAAAg4FAZNGiQduzY\n",

"oa+++krS6c9K4SPsAQCAHdr1gW8Oh0NRUVFqamrSwYMHJanFd/gAAABcqIBD5Z///KdmzJih7t27\n",

"q1u305e4OBwO1dfXd/hwAADg4hZwqPzhD3/Q5s2blZycbMc8AAAAPgH/rZ/evXsTKQAAoFMEHCrj\n",

"xo3T008/rfr6enk8Ht8NAACgowX81s/cuXMlSTNnzpTD4ZBlWXI4HHzoGwAA6HABh0pzc7MdcwAA\n",

"ALQQ8Fs/0ukvJnzxxRclSUePHlVdXV2HDgUAACC180sJp0yZoieeeELS6W9P/s1vftPRcwEAAAQe\n",

"KsuWLdPGjRsVEREhSUpISNDhw4c7fDAAAICAQ8XpdOqyyy7zeyw8vF0fcAsAAHBeAYdKnz59tGvX\n",

"LjkcDkmnP6mWj88HAAB2aNe3J0+aNEn/+c9/1L9/f0VERGjdunV2zAYAAC5yAYdKYmKiPv30U331\n",

"1VeyLItvTwYAALYJOFTcbrck6YorrpAkvj0ZAADYJuBQGT58uO8TaU+cOKEffvhBvXr14tuTAQBA\n",

"hws4VP73ryKvXr1aW7du7bCBAAAAzmjXJ9Oebfz48Xr99dc7YhYAAAA/Ab+icvY3JXu9Xn366ad8\n",

"ezIAALBFwKESFRXlu0YlLCxMAwcO1N///nc7ZgMAABc5vj0ZAAAY64KvUQEAALBLwK+odOvWzffx\n",

"+WezLEsOh0Ner7dDBgMAAAg4VBYsWKDjx49r6tSpkqSlS5fqsssu00MPPdTRswEAgItcwKGyZs0a\n",

"ffbZZ777Tz75pIYPH665c+d26GAAAAABX6Ny7Ngxv0+hra+v17Fjxzp0KAAAAKkdr6g8/PDDSk1N\n",

"1ejRoyVJb731lp544omOngsAACDwUCksLNTIkSNVWVkpSZo5c6auuuqqDh8MAAAg4FCRpF69emnY\n",

"sGG64YYb1NTUpJMnT+qSSy7p6NkAAMBFLuBrVFatWqURI0bovvvukyRt375d48aN6+i5AAAAAg+V\n",

"oqIiff7554qKipIkpaamav/+/R09FwAAQOChEhYWpl69evk9xts+AADADgGHSo8ePXTo0CHfp9O+\n",

"++676tmzZ4cPBgAAEPDFtH/605902223ae/evRo1apT27dun119/3Y7ZAADARS6gUGlubpbX61Vl\n",

"ZaU++eQTWZalrKws3/UqAAAAHSmgUOnWrZsKCgq0detW3XbbbXbNBAAAIKkd16gMHDhQ1dXVdswC\n",

"AADgJ+BrVI4cOaK0tDRlZWXpJz/5ie/x1atXd+hgAAAAbQ6VgoICLVu2TDk5OcrOztaVV15p51wA\n",

"AABtD5WqqipJUk5OjtLT0/X555/bNhQAAIDUjmtUJMmyrI6eAwAAoIU2v6Jy/Phxbdu2TZZl6cSJ\n",

"E76fz0hJSbFlQAAAcPEKKFSys7N998/+2eFwaO/evR07GQAAuOi1OVRqampsHAMAAKCldl2jAgAA\n",

"0BkIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxbA2V3bt3Kysr\n",

"S0lJScrIyND27dtbXWtZlm666SZFRUXZORIAAAghtoZKYWGhCgoKtGvXLs2ePVu5ubmtrv3b3/6m\n",

"hIQEO8cBAAAhxrZQqa+vV1VVlSZPnixJmjBhgmpra1VdXd1i7fbt2/Xaa6/p97///Y8et7GxUR6P\n",

"x+/m9Xo7fH4AABB8toVKbW2tYmJiFB5++nsPHQ6HXC6X3G6337pTp04pPz9fxcXFCgsL+9HjFhUV\n",

"KTIy0u+2adMmW/YAAACCK+gX086fP1/jx4/X4MGD27R+zpw5amho8LtlZmbaPCUAAAiGcLsO3L9/\n",

"f9XV1ampqUnh4eGyLEtut1sul8tv3QcffCC3261nnnlGTU1N8ng8iouL0+bNm9WnT58Wx3U6nXI6\n",

"nX6PteWVGAAAEHpse0UlOjpa6enpKisrkySVl5crNjZWiYmJfuvWr1+v/fv3q6amRh999JEiIiJU\n",

"U1NzzkgBAAAXF1vf+ikuLlZxcbGSkpK0aNEilZaWSpLy8vJUUVFh5x8NAAC6ANve+pGk5ORkbdiw\n",

"ocXjJSUl51wfFxeno0eP2jkSAAAIIUG/mBYAAKA1hAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAA\n",

"MBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAA\n",

"AGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoA\n",

"ADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagA\n",

"AABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQK\n",

"AAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWo\n",

"AAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADCWraGye/duZWVlKSkpSRkZGdq+\n",

"fXuLNe+9954yMzM1ZMgQXXXVVZo1a5aam5vtHAsAAIQIW0OlsLBQBQUF2rVrl2bPnq3c3NwWa668\n",

"8kqtXLlSO3bs0GeffaZPPvlEK1assHMsAAAQImwLlfr6elVVVWny5MmSpAkTJqi2tlbV1dV+666+\n",

"+mrFx8dLki699FKlpaWppqam1eM2NjbK4/H43bxer13bAAAAQWRbqNTW1iomJkbh4eGSJIfDIZfL\n",

"Jbfb3eo/880332jVqlUaM2ZMq2uKiooUGRnpd9u0aVOHzw8AAILPmItpPR6Pbr/9ds2aNUvXXHNN\n",

"q+vmzJmjhoYGv1tmZmYnTgoAADpLuF0H7t+/v+rq6tTU1KTw8HBZliW32y2Xy9Vi7bFjx3Trrbdq\n",

"7Nixmjlz5nmP63Q65XQ6/R4LCwvr0NkBAIAZbHtFJTo6Wunp6SorK5MklZeXKzY2VomJiX7rvv/+\n",

"e91666269dZb9dhjj9k1DgAACEG2vvVTXFys4uJiJSUladGiRSotLZUk5eXlqaKiQpK0ePFibdq0\n",

"SatXr1ZaWprS0tL0xz/+0c6xAABAiLDtrR9JSk5O1oYNG1o8XlJS4vt57ty5mjt3rp1jAACAEGXM\n",

"xbQAAAD/i1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAA\n",

"xiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAA\n",

"YCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEA\n",

"AMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUA\n",

"AGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1AB\n",

"AADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgV\n",

"AABgLEIFAAAYy9ZQ2b17t7KyspSUlKSMjAxt3779nOuWL1+ugQMHKiEhQfn5+Tp16pSdYwEAgBBh\n",

"a6gUFhaqoKBAu3bt0uzZs5Wbm9tizb59+zRv3jytX79e1dXVOnTokJYtW2bnWAAAIETYFir19fWq\n",

"qqrS5MmTJUkTJkxQbW2tqqur/datWrVK2dnZ6tu3rxwOhx544AG9/PLLrR63sbFRHo/H7+b1eu3a\n",

"BgAACKJwuw5cW1urmJgYhYef/iMcDodcLpfcbrcSExN969xutwYMGOC7HxcXJ7fb3epxi4qKNH/+\n",

"fL/HBg0apJkzZ3bo/F6vVzGbNikzM1NhYWEdemxJmjnz3Q4/ZqC8Xq822bjHYOvqz2FXf/4ke5/D\n",

"YD9/Es/hheI59DfehmN6vV794hdP2ra/AQMG6MEHHzzvGttCxS5z5sxpESVOp1NOp7ND/xyPx6PI\n",

"yEi9/fbbioiI6NBjm6Kr75H9hb6uvseuvj+p6++R/dnPtlDp37+/6urq1NTUpPDwcFmWJbfbLZfL\n",

"5bfO5XJpz549vvs1NTUt1pzNjigBAABmsu0alejoaKWnp6usrEySVF5ertjYWL+3faTT165UVFTo\n",

"m2++kWVZWrp0qe6++267xgIAACHE1r/1U1xcrOLiYiUlJWnRokUqLS2VJOXl5amiokKSFB8fr/nz\n",

"52vkyJFKTExUnz59VFhYaOdYAAAgRNh6jUpycrI2bNjQ4vGSkhK/+/n5+crPz7dzlIA5nU49/vjj\n",

"Xfptpq6+R/YX+rr6Hrv6/qSuv0f2Zz+HZVlW0P50AACA8+Aj9AEAgLEIFQAAYCxCBQAAGItQAQAA\n",

"xrroQ2XGjBmKi4uTw+HQF1980eq6UP2G57bs7/3339dll12mtLQ03+348eOdO2g7nThxQuPGjVNS\n",

"UpJSU1N1yy23tPg+qTPWrVunQYMGaeDAgRo/frw8Hk8nTxu4tu6vpqZGYWFhfs/h2R+kaLpf/vKX\n",

"SklJUVpamq699lpt2bLlnOtC9Txsy/5C+Tw8o7S0VA6HQ6+99to5fx+K5+D/Ot8eQ/k8jIuLU3Jy\n",

"sm/uV1555ZzrgnIOWhe5Dz74wKqtrbUGDBhgbdmy5Zxr9u7da8XExFh1dXVWc3Ozdfvtt1vPPPNM\n",

"5w7aTm3ZX2VlpZWamtqpc3WU48ePW6+//rrV3NxsWZZlLVmyxLr++utbrDt27JgVHR1t7dy507Is\n",

"y5o+fbr1yCOPdOao7dLW/e3bt8+KjIzs3OE60Hfffef7efXq1VZKSkqLNaF8HrZlf6F8HlrW6X8H\n",

"f/GLX1gjRoyw1qxZ0+L3oXoOnu3H9hjK5+H5/htxRrDOwYv+FZXrrrtOsbGx510T6Dc8m6Qt+wtl\n",

"l156qUaPHi2HwyFJGjFihGpqalqse/PNN3X11Vdr0KBBkqRp06aFxHPY1v2FuqioKN/PDQ0Nvv2e\n",

"LZTPw7bsL5Q1NzcrLy9PS5YsafXzNkL1HDyjLXvs6oJ1DobclxIGQ6Df8ByK9uzZo/T0dIWFhem+\n",

"++7TtGnTgj1SuyxevFhjx45t8fi5nsOzv4sqVLS2P0n673//q4yMDHm9Xo0bN05z584N+re5BuLe\n",

"e+9VZWWlJOmNN95o8ftQPw9/bH9S6J6Hf/3rXzVy5EgNHz681TWhfg62ZY9SaJ+H9957ryzLUmZm\n",

"phYtWqQ+ffr4/T5Y56D5/3bAdunp6Tpw4IAiIyN14MABjR49Wr1799Zdd90V7NECsnDhQlVXV+vd\n",

"d4P/1e92ON/+YmJidPDgQUVHR+vIkSP69a9/raeeekqzZs0KwqTts2LFCknSCy+8oNmzZ7f6H/NQ\n",

"9WP7C9Xz8Msvv1R5ebk+/PDDYI9im7buMZTPww8//FAul0unTp3SY489ppycHGPOwYv+rZ+2cLlc\n",

"2r9/v+/+j33Dc6iJiIhQZGSkJCk2NlaTJk3S+vXrgzxVYP7yl79o9erVevPNN3X55Ze3+P25nsOY\n",

"mJiQ+P/kpB/fn9PpVHR0tCSpZ8+emjJlSsg9h2fk5OSosrJS3377rd/jXeU8bG1/oXoerl+/XjU1\n",

"NRo4cKDi4uK0ceNGFRQU6LnnnvNbF8rnYFv3GMrn4ZlzqXv37nrooYfOOXfQzkHbr4IJEee7kGjP\n",

"nj0tLiBasmRJ5w54gc63v6+//tryer2WZVmWx+OxsrKyrOXLl3fidBfmqaeestLT060jR460usbj\n",

"8Vh9+vTxu5Dv4Ycf7qwRL0hb9nfo0CHr5MmTlmVZ1okTJ6yJEyda8+bN66wRL8h3331nHTx40Hd/\n",

"zZo1Vr9+/XwXEJ8RqudhW/cX6ufhGddff/05LzQN5XPwf7W2x1A9D7///nu/C76feuop69prr22x\n",

"Lljn4EUfKgUFBVa/fv2ssLAwKzo62kpISLAsy7Luv/9+a+3atb51y5Yts+Lj4634+HhrypQpvn8Z\n",

"TdeW/S1ZssQaMmSIlZKSYg0ZMsR6/PHHW/yPqKlqa2stSVZ8fLyVmppqpaamWpmZmZZlWda8efOs\n",

"5557zrd27dq1VnJyspWQkGCNHTvWOnr0aLDGbrO27q+8vNy66qqrfM/h7373O+vEiRPBHL3Nampq\n",

"rIyMDGvo0KFWSkqKdfPNN/uiuiuch23dXyifh2c7+z/iXeEcPJfW9hiq5+GePXustLQ0a9iwYdbQ\n",

"oUOt7Oxsa9++fZZlmXEO8qWEAADAWFyjAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABj\n",

"ESoAAMBYhAoAADAWoQIAAIxFqAAAAGP9P2gCxbRzNsu1AAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-ea6ca493-a353-477e-a72e-3a81a92120c2\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-ea6ca493-a353-477e-a72e-3a81a92120c2\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_1['Height(Inches)'].plot(kind='hist', bins=20, title='Height(Inches)')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-979d12f8-12d3-470c-84b8-c562a6279f84\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAigElEQVR4nO3de1CWdf7/8dctKGlyUNQBRXCQg0dEUTLUMstN+xl5qNYMi1oR\n",

"Xdu2sR0NrfnqVmptO512W/CQ2aqdUIuxMisPWVqCpzwloiCoKOYBdFQSvH5/NFH3wq3exOX9QZ+P\n",

"mXtGLj73xfu+Bpin131x3w7LsiwBAAAYqIGnBwAAAHCFUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQ\n",

"AQAAxiJUAACAsQgVAABgLEIFAAAYi1ABcFkzZszQH/7whytev2bNGjkcDlVUVLj9tS5cuKCuXbtq\n",

"48aNbt/3Srz11lsKCQmxZd+SdPfdd+utt96ybf/A9YZQAa5x/fv319NPP11te3JyspKSkq5oH1Om\n",

"TNHKlSuvylz/+c9/1L59e8XHx0uSCgoK5HA4lJeXV6df3y7PPfecJk+erHPnznl6FOCaQKgAMMbF\n",

"ixf18ssva+zYsZ4epda6deumsLAwLVy40NOjANcEQgWAzp8/rylTpqh9+/Zq1qyZbrnlFm3ZsqXq\n",

"89OmTVPfvn2rPj569KiGDh2qgIAAhYeHa9GiRXI4HFqzZo3Tfj/88ENFRUXJ19dXAwcO1KFDhyRJ\n",

"48aN07p16/Tiiy+qadOmatq0qSRp8+bNOnz4sG677TaXs/7ytFJmZmaN+5akc+fO6emnn676fHh4\n",

"uBYsWOC0n4yMDLVr107+/v667777VFZWVvW5U6dOafz48QoLC1NgYKDuuusu7d+/v+rz77//vjp3\n",

"7iw/Pz+1aNFCd9xxh9O+Bw0apKVLl17usAO4AoQKAI0bN04bN27U2rVrdezYMd1///268847derU\n",

"qRrXjxo1SpWVlcrPz9emTZv0/vvv17hu2bJlys7O1sGDB3X27FlNmTJFkpSenq5+/fpp0qRJOnPm\n",

"jM6cOSNJysnJUXh4uBo3bnzZmV3tW5JSUlK0cuVKffTRRyorK9PXX3+trl27Vn3+yJEj+uGHH7R7\n",

"92798MMP2rp1q/75z39KkizL0rBhw1RWVqYtW7bo8OHD6tq1q4YMGaILFy7o7NmzSkpK0uuvv66y\n",

"sjIdPHjQ6WtLUkxMjLKzsy/7GABcHqECXAdeeuklBQQEON0WL14sSTp+/LgWLFigf//73woJCZG3\n",

"t7cee+wx+fv7a/ny5dX2dfDgQa1atUovvPCCmjVrpmbNmun555+v8evOnDlT/v7+8vf316hRoy57\n",

"geyJEyfk7+9/RY/J1b5//PFHLVq0SG+88YY6duwoh8Oh1q1bq0ePHlX39fb21osvvqjGjRsrODhY\n",

"Q4cOrbr/li1b9M033ygjI0PNmzeXj4+PZsyYofz8fH333XeSpIYNG2r37t368ccfdcMNN2jAgAFO\n",

"s/n7++vkyZNX9DgAXBqhAlwH/va3v+nUqVNOt1GjRklS1UWqN910k1PIHDp0SAcPHqy2r1+eYgkL\n",

"C6va1q5duxq/buvWrav+feONN+r06dOXnLN58+YqLS29osfkat/5+fmSpOjoaJf3bdGihRo2bFjj\n",

"/ffu3auKigqFhIRUHYvAwEBJUlFRkZo0aaIVK1boiy++UHR0tLp27apXX33Vaf+lpaVq1qzZFT0O\n",

"AJfm7ekBAHhWUFCQJOn7779XaGjoZde3adNGknTgwAF16tSp6t/uatCg+v+T4uLitH//fp0/f143\n",

"3HCD2/uUfo2m3NxcxcXFuX3/oKAgNWrUSMeOHXOKmd/q16+f+vXrJ8uytHbtWg0aNEidOnXSwIED\n",

"JUnbt29Xz549azU/AGecUQGuc2FhYRo6dKgmTJhQFRynT5/Wp59+quLi4mrrQ0JC1L9/f6WlpVWd\n",

"nanpz4wvJygoSLm5uU7b4uLiFBwcrNWrV9fuwUhq2bKlHnjgAU2YMEF79uyRJBUXF2vz5s1XdP++\n",

"ffuqS5cuGj9+vEpKSiRJJ0+e1JIlS3T27FkdOXJEH3zwgU6dOiWHw6GAgAA5HA55e//6/74VK1Zo\n",

"2LBhtX4MAH5FqADQ4sWLFRcXp4EDB8rX11fR0dGaM2eOLMtyud6yLIWFhal79+5KTEyUJLfOgjz5\n",

"5JPas2ePmjVrpoCAAEk/n2V54oknlJGR8bsez5w5c3Trrbdq8ODBatq0qfr06aOdO3de0X29vLz0\n",

"+eefq0mTJrrpppvk6+urbt26admyZXI4HLIsS+np6QoPD1fTpk1177336vnnn6/6S6Xvv/9e+fn5\n",

"Gj169O96DAB+5rBc/SYCgCu0detWde/eXYcPH1ZwcPDv2teFCxfUvXt3vfnmm1Uv+lafJCYmatiw\n",

"YXrkkUc8PQpwTSBUALhtx44d+umnnxQbG6vDhw/roYcekiStWrXKw5MBuNbw1A8At5WWlmrkyJHy\n",

"9fVVXFycWrRooUWLFnl6LADXIM6oAAAAY3FGBQAAGItQAQAAxiJUAACAsQgVAABgrGsiVP73fTYA\n",

"AMC14ZoIldq8zwgAADDfNREqAADg2kSoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBY\n",

"hAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMJatofL444+rXbt2cjgc2rp1q8t18+bNU2RkpNq3\n",

"b6+UlBRduHDBzrEAAEA9YWuo3Hvvvfr6668VFhbmck1+fr6eeeYZrVu3Tnl5eTp69Khmz55t51gA\n",

"AKCesDVUbrnlFoWEhFxyTWZmphITExUUFCSHw6Fx48bpnXfecbm+vLxcZWVlTrfKysq6Hh0AABjA\n",

"29MDFBYWOp1xadeunQoLC12unzlzpqZPn+60rXfv3rbM1u6pj23ZryQVzPp/tu0bV4dd3x92fm/U\n",

"x5nrI44zPOFa/b6rdxfTpqWlqbS01OkWHx/v6bEAAIANPH5GJTQ0VPv27av6uKCgQKGhoS7X+/j4\n",

"yMfHx2mbl5eXbfMBAADP8fgZlREjRigrK0tHjhyRZVlKT0/XyJEjPT0WAAAwgK2hkpqaqpCQEB08\n",

"eFB33nmnIiIiJEljxoxRVlaWJCk8PFzTp09Xnz59FBERoZYtWyo1NdXOsQAAQD1h61M/GRkZNW6f\n",

"O3eu08cpKSlKSUmxcxQAAFAPefypHwAAAFcIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIF\n",

"AAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJU\n",

"AACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxC\n",

"BQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYi\n",

"VAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAs\n",

"QgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADG\n",

"IlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLFsDZW9e/cqISFBUVFR6tWrl3bu3FltzcWLFzVx\n",

"4kR16tRJMTExuu2225SXl2fnWAAAoJ6wNVRSU1M1duxY5ebmavLkyUpOTq62JisrS9988422bdum\n",

"77//XrfffrumTJli51gAAKCesC1USkpKlJOTo6SkJEnSiBEjVFRUVO1sicPhUHl5uc6fPy/LslRW\n",

"VqaQkBC7xgIAAPWIt107LioqUnBwsLy9f/4SDodDoaGhKiwsVERERNW6u+++W6tXr1ZQUJB8fX3V\n",

"pk0brV271uV+y8vLVV5e7rStsrLSngcBAAA8yuMX0+bk5GjHjh06dOiQDh8+rNtvv13jxo1zuX7m\n",

"zJny9/d3um3cuPEqTgwAAK4W20Klbdu2Ki4uVkVFhSTJsiwVFhYqNDTUad3bb7+tAQMGKCAgQA0a\n",

"NNDDDz+s1atXu9xvWlqaSktLnW7x8fF2PQwAAOBBtoVKq1at1KNHDy1cuFCStGTJEoWEhDg97SNJ\n",

"4eHhWrVqlX766SdJ0vLly9WlSxeX+/Xx8ZGfn5/TzcvLy66HAQAAPMi2a1QkKSMjQ8nJyZoxY4b8\n",

"/Pw0f/58SdKYMWOUmJioxMRETZgwQbt371a3bt3UsGFDBQUFKT093c6xAABAPWFrqERHR2vDhg3V\n",

"ts+dO7fq3z4+PpozZ46dYwAAgHrK4xfTAgAAuEKoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABj\n",

"ESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAw\n",

"FqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAA\n",

"YxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAA\n",

"MBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAA\n",

"AGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoA\n",

"ADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAY9kaKnv37lVCQoKioqLUq1cv7dy5\n",

"s8Z127dvV//+/dWxY0d17NhRS5cutXMsAABQT3jbufPU1FSNHTtWycnJyszMVHJysrKzs53WnD17\n",

"Vvfcc4/efvtt9e3bV5WVlTpx4oSdYwEAgHrCtjMqJSUlysnJUVJSkiRpxIgRKioqUl5entO6xYsX\n",

"q3fv3urbt68kycvLSy1btnS53/LycpWVlTndKisr7XoYAADAg2wLlaKiIgUHB8vb++eTNg6HQ6Gh\n",

"oSosLHRat2vXLvn4+GjIkCGKjY3VQw89pGPHjrnc78yZM+Xv7+9027hxo10PAwAAeJDbofLZZ5/V\n",

"6QAVFRX64osvlJGRoS1btqhNmzYaP368y/VpaWkqLS11usXHx9fpTAAAwAxuh8rf//53RUdH69VX\n",

"X1VZWZnLdW3btlVxcbEqKiokSZZlqbCwUKGhoU7rQkNDddttt6lNmzZyOBxKSkrSt99+63K/Pj4+\n",

"8vPzc7p5eXm5+zAAAEA94HaofPPNN3r33Xe1Y8cORUVF6c9//rN27dpVbV2rVq3Uo0cPLVy4UJK0\n",

"ZMkShYSEKCIiwmnd/fffr+zs7Kro+eSTT9StW7faPBYAAHCNqdU1Kt27d9ecOXO0YsUKLV++XDEx\n",

"MRo4cKC2b9/utC4jI0MZGRmKiorSrFmzNH/+fEnSmDFjlJWVJennMypTpkxRQkKCYmJitGrVKqWn\n",

"p//OhwUAAK4Ftfrz5C+++EKvv/66tm/frgkTJuhPf/qT1qxZo2HDhjn9VU90dLQ2bNhQ7f5z5851\n",

"+nj06NEaPXp0bUYBAADXMLdDpWPHjmrRooUef/xxDR8+vOr6kHvvvVfz5s2r8wEBAMD1y+1QWbhw\n",

"oeLi4mr83Keffvq7BwIAAPiF29eobNq0yemVY48fP645c+bU6VAAAABSLULljTfeUPPmzas+DgwM\n",

"1BtvvFGnQwEAAEi1CBXLsqpt4yXsAQCAHdwOleDgYL3//vtVH7/33nsKDg6u06EAAACkWlxM+8or\n",

"r+iee+7RpEmTJElNmjTRRx99VOeDAQAAuB0qHTp00K5du7Rnzx5JP79WCi9hDwAA7FCrF3xzOBwK\n",

"CAhQRUWFDh06JEnV3sMHAADg93I7VN566y09/vjjatiwoRo0+PkSF4fDoZKSkjofDgAAXN/cDpVn\n",

"n31W2dnZio6OtmMeAACAKm7/1U+LFi2IFAAAcFW4HSpDhw7VK6+8opKSEpWVlVXdAAAA6prbT/1M\n",

"nTpVkjRx4kQ5HA5ZliWHw8GLvgEAgDrndqhcvHjRjjkAAACqcfupH+nnNyb873//K0k6deqUiouL\n",

"63QoAAAAqZZvSvjoo49q2rRpkn5+9+RRo0bV9VwAAADuh8rs2bP17bffys/PT5LUvn17HTt2rM4H\n",

"AwAAcDtUfHx81LhxY6dt3t61eoFbAACAS3I7VFq2bKnc3Fw5HA5JP79SLS+fDwAA7FCrd09+4IEH\n",

"9MMPP6ht27by8/PT8uXL7ZgNAABc59wOlYiICH333Xfas2ePLMvi3ZMBAIBt3A6VwsJCSdKNN94o\n",

"Sbx7MgAAsI3boRIXF1f1irTnz5/X2bNnFRgYyLsnAwCAOud2qPzvnyIvXbpU27Ztq7OBAAAAflGr\n",

"V6b9reHDh+vjjz+ui1kAAACcuH1G5bfvlFxZWanvvvuOd08GAAC2cDtUAgICqq5R8fLyUmRkpF57\n",

"7TU7ZgMAANc53j0ZAAAY63dfowIAAGAXt8+oNGjQoOrl83/Lsiw5HA5VVlbWyWAAAABuh8rf//53\n",

"nTt3TuPHj5ckpaenq3HjxnriiSfqejYAAHCdcztUli1bpk2bNlV9/NxzzykuLk5Tp06t08EAAADc\n",

"vkbl9OnTTq9CW1JSotOnT9fpUAAAAFItzqg8+eST6tatm+666y5J0ooVKzRt2rS6ngsAAMD9UElN\n",

"TVWfPn20evVqSdLEiRPVuXPnOh8MAADA7VCRpMDAQHXt2lX9+/dXRUWFfvrpJzVq1KiuZwMAANc5\n",

"t69RyczMVO/evfXII49Iknbu3KmhQ4fW9VwAAADuh8rMmTO1efNmBQQESJK6deumAwcO1PVcAAAA\n",

"7oeKl5eXAgMDnbbxtA8AALCD26Hi6+uro0ePVr067ZdffqnmzZvX+WAAAABuX0z7wgsvaPDgwdq/\n",

"f7/69u2r/Px8ffzxx3bMBgAArnNuhcrFixdVWVmp1atXa/369bIsSwkJCVXXqwAAANQlt0KlQYMG\n",

"Gjt2rLZt26bBgwfbNRMAAICkWlyjEhkZqby8PDtmAQAAcOL2NSonTpxQbGysEhIS1LRp06rtS5cu\n",

"rdPBAAAArjhUxo4dq9mzZ+vhhx9WYmKimjVrZudcAAAAVx4qOTk5kqSHH35YPXr00ObNm20bCgAA\n",

"QKrFNSqSZFlWXc8BAABQzRWfUTl37py2b98uy7J0/vz5qn//IiYmxpYBAQDA9cutUElMTKz6+Lf/\n",

"djgc2r9/f91OBgAArntXHCoFBQU2jgEAAFBdra5RAQAAuBoIFQAAYCxCBQAAGItQAQAAxiJUAACA\n",

"sQgVAABgLEIFAAAYi1ABAADGIlQAAICxbA2VvXv3KiEhQVFRUerVq5d27tzpcq1lWRowYIACAgLs\n",

"HAkAANQjtoZKamqqxo4dq9zcXE2ePFnJycku17788stq3769neMAAIB6xrZQKSkpUU5OjpKSkiRJ\n",

"I0aMUFFRkfLy8qqt3blzpz788EM99dRTl91veXm5ysrKnG6VlZV1Pj8AAPA820KlqKhIwcHB8vb+\n",

"+X0PHQ6HQkNDVVhY6LTuwoULSklJUUZGhry8vC6735kzZ8rf39/ptnHjRlseAwAA8CyPX0w7ffp0\n",

"DR8+XB07dryi9WlpaSotLXW6xcfH2zwlAADwBG+7dty2bVsVFxeroqJC3t7esixLhYWFCg0NdVq3\n",

"du1aFRYW6l//+pcqKipUVlamdu3aKTs7Wy1btqy2Xx8fH/n4+Dhtu5IzMQAAoP6x7YxKq1at1KNH\n",

"Dy1cuFCStGTJEoWEhCgiIsJp3bp163TgwAEVFBTo66+/lp+fnwoKCmqMFAAAcH2x9amfjIwMZWRk\n",

"KCoqSrNmzdL8+fMlSWPGjFFWVpadXxoAAFwDbHvqR5Kio6O1YcOGatvnzp1b4/p27drp1KlTdo4E\n",

"AADqEY9fTAsAAOAKoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAw\n",

"FqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAA\n",

"YxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAA\n",

"MBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAA\n",

"AGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoA\n",

"ADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagA\n",

"AABjESoAAMBYhAoAADAWoQIAAIxla6js3btXCQkJioqKUq9evbRz585qa1atWqX4+Hh16tRJnTt3\n",

"1qRJk3Tx4kU7xwIAAPWEraGSmpqqsWPHKjc3V5MnT1ZycnK1Nc2aNdO7776rXbt2adOmTVq/fr3e\n",

"fvttO8cCAAD1hG2hUlJSopycHCUlJUmSRowYoaKiIuXl5Tmt6969u8LDwyVJN9xwg2JjY1VQUOBy\n",

"v+Xl5SorK3O6VVZW2vUwAACAB9kWKkVFRQoODpa3t7ckyeFwKDQ0VIWFhS7vc+TIEWVmZmrIkCEu\n",

"18ycOVP+/v5Ot40bN9b5/AAAwPOMuZi2rKxMd999tyZNmqSePXu6XJeWlqbS0lKnW3x8/FWcFAAA\n",

"XC3edu24bdu2Ki4uVkVFhby9vWVZlgoLCxUaGlpt7enTpzVo0CDdc889mjhx4iX36+PjIx8fH6dt\n",

"Xl5edTo7AAAwg21nVFq1aqUePXpo4cKFkqQlS5YoJCREERERTuvOnDmjQYMGadCgQXr66aftGgcA\n",

"ANRDtj71k5GRoYyMDEVFRWnWrFmaP3++JGnMmDHKysqSJL366qvauHGjli5dqtjYWMXGxur555+3\n",

"cywAAFBP2PbUjyRFR0drw4YN1bbPnTu36t9Tp07V1KlT7RwDAADUU8ZcTAsAAPC/CBUAAGAsQgUA\n",

"ABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQA\n",

"AICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIF\n",

"AAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJU\n",

"AACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxC\n",

"BQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYi\n",

"VAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxbA2VvXv3\n",

"KiEhQVFRUerVq5d27txZ47p58+YpMjJS7du3V0pKii5cuGDnWAAAoJ6wNVRSU1M1duxY5ebmavLk\n",

"yUpOTq62Jj8/X88884zWrVunvLw8HT16VLNnz7ZzLAAAUE/YFiolJSXKyclRUlKSJGnEiBEqKipS\n",

"Xl6e07rMzEwlJiYqKChIDodD48aN0zvvvONyv+Xl5SorK3O6VVZW2vUwAACABzksy7Ls2PGmTZs0\n",

"atQo7dmzp2pbfHy8Zs2apQEDBlRt+8tf/qLWrVsrLS1NkrRr1y4NGjRIhYWFNe532rRpmj59utO2\n",

"Dh06aPDgwTY8it+nsrJSGzduVHx8vLy8vDw9Tr3Csas9jl3tcNxqj2NXe9f7sQsLC9Nf//rXS67x\n",

"vkqz1Jm0tDRNnDjRaZuPj498fHw8NJFrZWVl8vf312effSY/Pz9Pj1OvcOxqj2NXOxy32uPY1R7H\n",

"7vJsC5W2bduquLhYFRUV8vb2lmVZKiwsVGhoqNO60NBQ7du3r+rjgoKCamt+y9QoAQAAdc+2a1Ra\n",

"tWqlHj16aOHChZKkJUuWKCQkRBEREU7rRowYoaysLB05ckSWZSk9PV0jR460aywAAFCP2PpXPxkZ\n",

"GcrIyFBUVJRmzZql+fPnS5LGjBmjrKwsSVJ4eLimT5+uPn36KCIiQi1btlRqaqqdYwEAgHrC1mtU\n",

"oqOjtWHDhmrb586d6/RxSkqKUlJS7BzFI3x8fPR///d/PFVVCxy72uPY1Q7HrfY4drXHsbs82/7q\n",

"BwAA4PfiJfQBAICxCBUAAGAsQgUAABiLUAEAAMYiVOpQeXm5HnvsMUVGRqpr165V73Pkajt+VdMx\n",

"On78uGJjY6tuUVFR8vb21okTJzw9rjFcfW998skn6tGjh2JjY9WlSxctWLDAw5Oax9WxW7FihXr2\n",

"7KmYmBj17t1b27Zt8/CkZrnUz2VJSYkGDRqkyMhIdenSRV999ZWnxzXKpY7djBkzFB0drQYNGujD\n",

"Dz/09KhGqXcvoW+yp556Sg6HQ7m5uXI4HDpy5Mglt+NXNR2jwMBAbd26tWrNSy+9pLVr16p58+ae\n",

"G9QwNR03y7KUlJSkNWvWKCYmRgUFBerQoYOGDx8uX19fT49sjJqO3cmTJ/Xggw/qq6++UufOnbVu\n",

"3To9+OCD2rFjh6fHNcalfi4fffRR9e7dWytWrFB2draGDRum/Px8NWzY0HMDG+RSx+6OO+7QyJEj\n",

"9eijj3puQFNZqBNnzpyxfH19rdLS0ivajl9d6THq0KGDtWzZsqszVD3g6rhdvHjRat68ubV27VrL\n",

"sixr27ZtVuvWra3y8nJPjGkkV8cuOzvbioyMdNrm6+trbdq06WqOV6/89ufyxhtvtIqLi6s+16tX\n",

"L+vzzz/30GTmq+l32q233srvuf/BUz91ZN++fWrevLlmzJihnj17ql+/fvryyy9dbsevruQYrV+/\n",

"XidPntSQIUM8NKV5XB03h8Oh9957T8OHD1dYWJj69u2rBQsWqFGjRp4e2Riujl1kZKSOHz+u9evX\n",

"S5KysrJ0+vRpFRQUeHZgQ/325/L48eO6cOGCgoKCqj7frl07FRYWenBCc/E77coRKnWkoqJCBw4c\n",

"UKdOnZSTk6PXXntNf/zjH3Xu3Lkatx89etTTIxvD1bH77TGaN2+eHnroIXl782zlLy513J577jkt\n",

"XbpUBw4c0JdffqnRo0frxx9/9PTIxnB17M6fP6/MzEylpaUpLi5OK1euVKdOnfi+c4Gfy9rj2LnB\n",

"06d0rhXHjh2zGjRoYFVUVFRt69mzp/XBBx/UuJ3Tob9ydex+OUanT5+2mjZtau3evdtTIxrJ1XH7\n",

"xz/+Ue3pi549e1orV6682iMa63Lfc784f/68FRAQYO3du/dqj2i8mn4umzRpwlM/V+BSv9N46qc6\n",

"zqjUkRYtWuj222/XZ599JknKz89Xfn6+br755hq3d+zY0ZPjGsXVsfvlGL333nvq1q2bOnTo4Mkx\n",

"jePquN13330qLi7W7t27JUl5eXnat2+foqOjPTmuUS71PVdcXFy17tlnn9WAAQOqves7av65vO++\n",

"+5Seni5Jys7O1qFDh3Trrbd6akRj8TvNTZ4upWvJvn37rP79+1tdunSxYmJirMzMzEtux68udYxu\n",

"vvlm68033/TgdOZyddwWL15cta1Lly7WokWLPDypeVwduzFjxljR0dFW+/btraSkJOvkyZOeHdRQ\n",

"Nf1cHjlyxBo4cKAVERFhderUyVq1apWHpjNbTcfu2Weftdq0aWM1atTICgwMtNq0aWOVlJR4aEKz\n",

"8KaEAADAWDz1AwAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIA\n",

"AIxFqAAAAGP9f28Jfq5yL+BvAAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-979d12f8-12d3-470c-84b8-c562a6279f84\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-979d12f8-12d3-470c-84b8-c562a6279f84\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_2['Weight(Pounds)'].plot(kind='hist', bins=20, title='Weight(Pounds)')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-4aee5d16-90ec-4fa2-a34e-00f82e8db190\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAliklEQVR4nO3df1RUdf7H8dcINlmKKGqwwkAKmGVKEizRD39i6pa60m5tadGG\n",

"om3b6bDfk1l5ytbC2tOvdXNFLcws+yFWlGVRWratpViaYv7AxJkMwX4g2iYK3u8fnuY4AcrgXEc+\n",

"PR/nzDnO5XJ5f3Ru+9yZy4zDsixLAAAArVybYA8AAAAQCEQNAAAwAlEDAACMQNQAAAAjEDUAAMAI\n",

"RA0AADACUQMAAIxA1AAAACMQNQAAwAhEDYATat++vT744INm7z9w4EDde++9LfpZL7zwgn73u9+1\n",

"6HtPlbKyMjkcDpWXl59w30cffVRZWVm2zwSAqAGMM2vWLEVGRurYT0BZsWKFHA6HHnjgAZ99x44d\n",

"qxtuuOGExzxw4IAGDhwYsBk/+OADORwO1dXV+Ww/ePCg/u///k8PPvigd1tWVpbatm2r9u3bq0OH\n",

"DkpISNDMmTMDNovdbrvtNr377rsqKSkJ9iiA8YgawDAZGRmqrKzUxo0bvduKi4vVp08fvffee95t\n",

"9fX1WrlypYYNGxaMMRu1ePFiRUdHKykpyWf7tddeqwMHDqimpkazZ8/W9OnTtWDBgqDM6C+n06lx\n",

"48bp8ccfD/YogPGIGsAw5513nlwul4qLi73biouLdf/992vdunU6cOCAJGnt2rWqrq7W0KFD9emn\n",

"n2rgwIGKiIhQbGyspk2b5vMsisPh8AmigoICxcfHq0OHDho7dqxuu+22Bs/k7N+/X9dff706duyo\n",

"mJgY/fvf/5Ykud1ujRgxQpIUHh6u9u3b66GHHpIkFRYW6sorr2xybQ6HQxkZGbrgggu0bt06SdLq\n",

"1at1+eWXq1OnTjr33HN11113qba2tsnZy8vL5XA4VFZWJklasGCBoqOjlZ+fr7i4OHXs2FF/+MMf\n",

"VFNT4/2eHTt2aMiQIQoLC1Pv3r21cuVKn7k2bNigAQMGKDw8XJ06dVJycrK2bt3q/frw4cP1xhtv\n",

"NHhmCkBgETWAgTIyMrxR891332nz5s0aOXKkLrroIu+1McXFxTr//PN14MABDRkyRJMmTVJlZaVW\n",

"rVqloqIiPfzww40ee9WqVZo0aZJmzZql6upqZWdn65lnnmmw34IFC5Sdna0ffvhBTzzxhG677TaV\n",

"lZXJ5XLp7bffliRVV1frwIEDuvvuuyVJJSUl6tOnT5PrOnLkiN59911t2rRJqampcrvdGjp0qDIz\n",

"M1VZWal3331Xb7zxhqZMmeLX39eePXu0ZcsWffnll9qyZYvWr1+vRx99VNLRZ7SuvvpquVwuVVRU\n",

"qLi4WPPmzfP5/ltvvVVDhgzRt99+q7179+rpp59WeHi49+t9+/bV/v37tWXLFr/mAuAfogYw0LBh\n",

"w7Rq1SrV1tbq/fffV1pamtq1a6ehQ4d6Y6e4uFjDhg3TU089pauvvlrXXXedQkNDFRsbqzvvvFMF\n",

"BQWNHnvhwoUaPXq0RowYoZCQEI0cOVIjR45ssF9mZqYGDx6sNm3aKDMzU507d/Y+u9KU77//Xh07\n",

"dmyw/eWXX1Z4eLi6du2q3NxcPfjggxo/fryef/55JSYm6o477tAZZ5yhhIQEzZgxQ3PnzvW5puhE\n",

"QkND9cgjj6hdu3aKiorSmDFjtGbNGknSJ598oq1bt+qJJ57Q2WefrejoaE2bNs3n+8844wy53W7t\n",

"2rVLoaGhSkpK0jnnnOP9+s9r+v7775s9EwD/ETWAgYYMGaLa2lp9/PHHKi4u1tChQ73bi4uLdeDA\n",

"AX3yySfKyMjQ9u3b9eqrryo8PNx7mzx5svbs2dPosXfv3q3Y2FifbXFxcQ32+81vfuNz/+yzz9b+\n",

"/fuPO3fnzp21b9++Btv/+Mc/qrq6Wt999502bdqkv/3tb5Ikj8ejnj17+uwbHx+vn376SXv37j3u\n",

"zzpWly5d1LZt20Zn/frrr9WpUyef2Dr33HN9vn/BggVyOBwaPHiwoqOjdccdd3hf5pPkXVPnzp2b\n",

"PRMA/xE1gIEiIiLUv39/FRcX+0RNWlqaPB6PFi1aJIfDoQEDBigyMlLXX3+9qqurvbeamhqf/1E+\n",

"Vvfu3bVr1y6fbb+8fyJt2jT+n57k5GSVlpY2+zgxMTH66quvfLbt2LFD7dq1U9euXSUd/XX0H3/8\n",

"0fv1b775xq9Zo6Oj9cMPP/jE1i9/lTs2Nlbz5s3Trl279MEHH6i4uFh5eXner2/cuFHt27fXeeed\n",

"59fPBuAfogYw1LBhw/Tss89q3759uvjiiyVJbdu21eWXX64HHnhA6enpOvvss3XrrbdqyZIleuWV\n",

"V3To0CHV19errKxMy5cvb/S448eP1+uvv6533nlH9fX1Wr58ud566y2/ZouMjJQkn4tppaO/Yv7O\n",

"O+80+zjXX3+9tm7dqlmzZunQoUPasWOHpk2bpuzsbDkcDknSxRdfrAULFujgwYOqrKzU9OnT/Zr1\n",

"t7/9rRISEpSbm6sff/xRu3fv1owZM3z2WbBggb7++mtZlqWwsDCFhoYqNDTU+/Xly5frqquu8tkG\n",

"IPCIGsBQw4YNU0VFhQYNGuTzzMjQoUNVUVGhjIwMSVJKSor34tfu3bsrIiJC11xzTZPPvgwYMECz\n",

"Z8/WrbfeqvDwcOXn5+uGG27QmWee2ezZEhMT9de//lWDBg1SeHi4931nbrjhBrndbq1fv75Zx4mN\n",

"jdW7776rl156Sd26ddPgwYM1YsQIPfLII959nnrqKe3Zs0ddunRRRkaGxo8f3+w5paPX27zxxhva\n",

"uXOnoqKiNHToUN1yyy0++6xcuVKpqalq3769+vXrp0suucR7sfKhQ4f03HPPKTc316+fC8B/Dsuf\n",

"q+kAoBFjxozROeeco/z8/JM+1vPPP68XXnhBy5YtC8BkwffYY49pw4YNevbZZ4M9CmA8ogaA3woL\n",

"C5WRkaF27dpp6dKluuGGG7RixQpdccUVwR4NwK8YL/AC8Nsbb7yhCRMm6NChQ4qNjdUzzzxD0AAI\n",

"Op6pAQAARuBCYQAAYASiBgAAGIGoAQAARiBqAACAEYyImieffDLYIwAAgCAzImr8/dwZAABgHiOi\n",

"BgAAgKgBAABGIGoAAIARiBoAAGAEogYAABiBqAEAAEYgagAAgBGIGgAAYASiBgAAGIGoAQAARiBq\n",

"AACAEYgaAABgBFuj5vbbb1dcXJwcDofWr1/f5H5PP/20EhIS1LNnT02YMEGHDx+2cywAAGAgW6Pm\n",

"mmuu0X/+8x/FxsY2uc/OnTs1bdo0ffTRRyorK1NlZaXmzp1r51gAAMBAtkbNFVdcoejo6OPus2TJ\n",

"Eo0aNUqRkZFyOByaNGmSFi9e3OT+tbW1qqmp8bnV19cHenQAANDKhAZ7ALfb7fNMTlxcnNxud5P7\n",

"5+Xlafr06T7b0tLSbJkt7q5lthxXkspn/s62YwM4Mc5vX3b+fdilNf4928muf8PW9Pfc6i4Unjp1\n",

"qvbt2+dzS01NDfZYAAAgyIL+TI3L5dKOHTu898vLy+VyuZrc3+l0yul0+mwLCQmxbT4AANA6BP2Z\n",

"mszMTBUVFWnPnj2yLEtz5szRddddF+yxAABAK2Nr1OTk5Cg6Olpff/21rrzySsXHx0uSsrOzVVRU\n",

"JEnq0aOHpk+frksvvVTx8fHq2rWrcnJy7BwLAAAYyNaXn/Lz8xvdPn/+fJ/7EyZM0IQJE+wcBQAA\n",

"GC7oLz8BAAAEAlEDAACMQNQAAAAjEDUAAMAIRA0AADACUQMAAIxA1AAAACMQNQAAwAhEDQAAMAJR\n",

"AwAAjEDUAAAAIxA1AADACEQNAAAwAlEDAACMQNQAAAAjEDUAAMAIRA0AADACUQMAAIxA1AAAACMQ\n",

"NQAAwAhEDQAAMAJRAwAAjEDUAAAAIxA1AADACEQNAAAwAlEDAACMQNQAAAAjEDUAAMAIRA0AADAC\n",

"UQMAAIxA1AAAACMQNQAAwAhEDQAAMAJRAwAAjEDUAAAAIxA1AADACEQNAAAwAlEDAACMQNQAAAAj\n",

"EDUAAMAIRA0AADACUQMAAIxA1AAAACMQNQAAwAhEDQAAMAJRAwAAjEDUAAAAIxA1AADACEQNAAAw\n",

"AlEDAACMQNQAAAAjEDUAAMAIRA0AADACUQMAAIxA1AAAACMQNQAAwAhEDQAAMAJRAwAAjEDUAAAA\n",

"IxA1AADACEQNAAAwgq1Rs337dqWnpysxMVEpKSkqLS1tsM+RI0eUm5ur888/X3379tWgQYNUVlZm\n",

"51gAAMBAtkZNTk6OJk6cqG3btmnKlCnKyspqsE9RUZE+/vhjbdiwQV988YWGDBmiu+++286xAACA\n",

"gWyLmqqqKpWUlGjcuHGSpMzMTHk8ngbPwjgcDtXW1urgwYOyLEs1NTWKjo62aywAAGCoULsO7PF4\n",

"FBUVpdDQoz/C4XDI5XLJ7XYrPj7eu9/VV1+tlStXKjIyUh06dFD37t314YcfNnnc2tpa1dbW+myr\n",

"r6+3ZxEAAKDVCPqFwiUlJdq0aZN2796tb775RkOGDNGkSZOa3D8vL08dO3b0ua1Zs+YUTgwAAE5H\n",

"tkVNTEyMKioqVFdXJ0myLEtut1sul8tnv4ULF2rw4MEKDw9XmzZtdNNNN2nlypVNHnfq1Knat2+f\n",

"zy01NdWuZQAAgFbCtqjp1q2b+vfvr0WLFkmSCgsLFR0d7fPSkyT16NFDK1as0KFDhyRJb775pvr0\n",

"6dPkcZ1Op8LCwnxuISEhdi0DAAC0ErZdUyNJ+fn5ysrK0kMPPaSwsDAVFBRIkrKzszVq1CiNGjVK\n",

"f/nLX/Tll1+qX79+atu2rSIjIzVnzhw7xwIAAAayNWp69eql1atXN9g+f/5875+dTqfmzZtn5xgA\n",

"AOBXIOgXCgMAAAQCUQMAAIxA1AAAACMQNQAAwAhEDQAAMAJRAwAAjEDUAAAAIxA1AADACEQNAAAw\n",

"AlEDAACMQNQAAAAjEDUAAMAIRA0AADACUQMAAIxA1AAAACMQNQAAwAhEDQAAMAJRAwAAjEDUAAAA\n",

"IxA1AADACEQNAAAwAlEDAACMQNQAAAAjEDUAAMAIRA0AADACUQMAAIxA1AAAACMQNQAAwAhEDQAA\n",

"MAJRAwAAjEDUAAAAIxA1AADACEQNAAAwAlEDAACMQNQAAAAjEDUAAMAIRA0AADACUQMAAIxA1AAA\n",

"ACMQNQAAwAhEDQAAMAJRAwAAjEDUAAAAIxA1AADACEQNAAAwAlEDAACMQNQAAAAjEDUAAMAIRA0A\n",

"ADACUQMAAIxA1AAAACMQNQAAwAhEDQAAMAJRAwAAjEDUAAAAIxA1AADACEQNAAAwAlEDAACMQNQA\n",

"AAAjEDUAAMAIRA0AADACUQMAAIxga9Rs375d6enpSkxMVEpKikpLSxvdb+PGjRo4cKB69+6t3r17\n",

"a+nSpXaOBQAADBRq58FzcnI0ceJEZWVlacmSJcrKytLatWt99vnf//6n0aNHa+HChbrssstUX1+v\n",

"77//3s6xAACAgWx7pqaqqkolJSUaN26cJCkzM1Mej0dlZWU++73wwgtKS0vTZZddJkkKCQlR165d\n",

"mzxubW2tampqfG719fV2LQMAALQStkWNx+NRVFSUQkOPPhnkcDjkcrnkdrt99tu8ebOcTqeuuuoq\n",

"JSUl6cYbb9TevXubPG5eXp46duzoc1uzZo1dywAAAK2E31HzzjvvBHSAuro6vffee8rPz9fnn3+u\n",

"7t27a/LkyU3uP3XqVO3bt8/nlpqaGtCZAABA6+N31DzwwAPq1auXnnzySdXU1DS5X0xMjCoqKlRX\n",

"VydJsixLbrdbLpfLZz+Xy6VBgwape/fucjgcGjdunD755JMmj+t0OhUWFuZzCwkJ8XcZAADAMH5H\n",

"zccff6wXX3xRmzZtUmJiom699VZt3ry5wX7dunVT//79tWjRIklSYWGhoqOjFR8f77PfH//4R61d\n",

"u9YbSG+99Zb69evXkrUAAIBfsRZdU3PRRRdp3rx5Wr58ud5880317dtXGRkZ2rhxo89++fn5ys/P\n",

"V2JiombOnKmCggJJUnZ2toqKiiQdfabm7rvvVnp6uvr27asVK1Zozpw5J7ksAADwa9OiX+l+7733\n",

"NGvWLG3cuFF/+ctfdMstt+iDDz7Q73//e5/fburVq5dWr17d4Pvnz5/vc3/8+PEaP358S0YBAACQ\n",

"1IKo6d27t7p06aLbb79dY8eO9V7Pcs011+jpp58O+IAAAADN4XfULFq0SMnJyY1+7e233z7pgQAA\n",

"AFrC72tq1q1b5/OOv999953mzZsX0KEAAAD85XfUzJ49W507d/bej4iI0OzZswM6FAAAgL/8jhrL\n",

"shps42MKAABAsPkdNVFRUXr55Ze991966SVFRUUFdCgAAAB/+X2h8BNPPKHRo0frzjvvlCSdddZZ\n",

"ev311wM+GAAAgD/8jprzzjtPmzdv1tatWyUdfS8aPqYAAAAEW4vefM/hcCg8PFx1dXXavXu3JDX4\n",

"TCcAAIBTye+oWbBggW6//Xa1bdtWbdocvSTH4XCoqqoq4MMBAAA0l99R8/e//11r165Vr1697JgH\n",

"AACgRfz+7acuXboQNAAA4LTjd9SMGTNGTzzxhKqqqlRTU+O9AQAABJPfLz/dc889kqTc3Fw5HA5Z\n",

"liWHw8Eb8AEAgKDyO2qOHDlixxwAAAAnxe+Xn6SjH2r53HPPSZKqq6tVUVER0KEAAAD81aIPtPzz\n",

"n/+s+++/X9LRT+m+/vrrAz0XAACAX/yOmrlz5+qTTz5RWFiYJKlnz57au3dvwAcDAADwh99R43Q6\n",

"1a5dO59toaEtemNiAACAgPE7arp27apt27bJ4XBIOvoOw3xEAgAACLYWfUr3n/70J23ZskUxMTEK\n",

"CwvTm2++acdsAAAAzeZ31MTHx+vTTz/V1q1bZVkWn9INAABOC35HjdvtliSdffbZksSndAMAgNOC\n",

"31GTnJzsfSfhgwcP6n//+58iIiL4lG4AABBUfkfNL399e+nSpdqwYUPABgIAAGiJFr2j8LHGjh2r\n",

"ZcuWBWIWAACAFvP7mZpjP5G7vr5en376KZ/SDQAAgs7vqAkPD/deUxMSEqKEhAT985//tGM2AACA\n",

"ZuNTugEAgBFO+poaAACA04Hfz9S0adPG+xEJx7IsSw6HQ/X19QEZDAAAwB9+R80DDzygn376SZMn\n",

"T5YkzZkzR+3atdMdd9wR6NkAAACaze+oefXVV7Vu3Trv/RkzZig5OVn33HNPQAcDAADwh9/X1Ozf\n",

"v9/n3YOrqqq0f//+gA4FAADgL7+fqfnb3/6mfv36aeTIkZKk5cuX6/777w/0XAAAAH7xO2pycnJ0\n",

"6aWXauXKlZKk3NxcXXDBBQEfDAAAwB9+R40kRURE6MILL9TAgQNVV1enQ4cO6Ywzzgj0bAAAAM3m\n",

"9zU1S5YsUVpamm6++WZJUmlpqcaMGRPouQAAAPzid9Tk5eXps88+U3h4uCSpX79+2rVrV6DnAgAA\n",

"8IvfURMSEqKIiAifbbz0BAAAgs3vqOnQoYMqKyu97yr8/vvvq3PnzgEfDAAAwB9+Xyj88MMPa8SI\n",

"Efrqq6902WWXaefOnVq2bJkdswEAADSbX1Fz5MgR1dfXa+XKlfrvf/8ry7KUnp7uvb4GAAAgWPyK\n",

"mjZt2mjixInasGGDRowYYddMAAAAfvP7mpqEhASVlZXZMQsAAECL+X1Nzffff6+kpCSlp6erffv2\n",

"3u1Lly4N6GAAAAD+aHbUTJw4UXPnztVNN92kUaNGqVOnTnbOBQAA4JdmR01JSYkk6aabblL//v31\n",

"2Wef2TYUAACAv/y+pkaSLMsK9BwAAAAnpdnP1Pz000/auHGjLMvSwYMHvX/+Wd++fW0ZEAAAoDn8\n",

"ippRo0Z57x/7Z4fDoa+++iqwkwEAAPih2VFTXl5u4xgAAAAnp0XX1AAAAJxuiBoAAGAEogYAABiB\n",

"qAEAAEYgagAAgBGIGgAAYASiBgAAGIGoAQAARiBqAACAEWyNmu3btys9PV2JiYlKSUlRaWlpk/ta\n",

"lqXBgwcrPDzczpEAAIChbI2anJwcTZw4Udu2bdOUKVOUlZXV5L6PP/64evbsaec4AADAYLZFTVVV\n",

"lUpKSjRu3DhJUmZmpjwej8rKyhrsW1paqtdee0133XXXCY9bW1urmpoan1t9fX3A5wcAAK2LbVHj\n",

"8XgUFRWl0NCjn5npcDjkcrnkdrt99jt8+LAmTJig/Px8hYSEnPC4eXl56tixo89tzZo1tqwBAAC0\n",

"HkG/UHj69OkaO3asevfu3az9p06dqn379vncUlNTbZ4SAACc7kLtOnBMTIwqKipUV1en0NBQWZYl\n",

"t9stl8vls9+HH34ot9utf/3rX6qrq1NNTY3i4uK0du1ade3atcFxnU6nnE6nz7bmPMMDAADMZtsz\n",

"Nd26dVP//v21aNEiSVJhYaGio6MVHx/vs99HH32kXbt2qby8XP/5z38UFham8vLyRoMGAACgKba+\n",

"/JSfn6/8/HwlJiZq5syZKigokCRlZ2erqKjIzh8NAAB+ZWx7+UmSevXqpdWrVzfYPn/+/Eb3j4uL\n",

"U3V1tZ0jAQAAQwX9QmEAAIBAIGoAAIARiBoAAGAEogYAABiBqAEAAEYgagAAgBGIGgAAYASiBgAA\n",

"GIGoAQAARiBqAACAEYgaAABgBKIGAAAYgagBAABGIGoAAIARiBoAAGAEogYAABiBqAEAAEYgagAA\n",

"gBGIGgAAYASiBgAAGIGoAQAARiBqAACAEYgaAABgBKIGAAAYgagBAABGIGoAAIARiBoAAGAEogYA\n",

"ABiBqAEAAEYgagAAgBGIGgAAYASiBgAAGIGoAQAARiBqAACAEYgaAABgBKIGAAAYgagBAABGIGoA\n",

"AIARiBoAAGAEogYAABiBqAEAAEYgagAAgBGIGgAAYASiBgAAGIGoAQAARiBqAACAEYgaAABgBKIG\n",

"AAAYgagBAABGIGoAAIARiBoAAGAEogYAABiBqAEAAEYgagAAgBGIGgAAYASiBgAAGIGoAQAARiBq\n",

"AACAEYgaAABgBKIGAAAYgagBAABGIGoAAIARbI2a7du3Kz09XYmJiUpJSVFpaWmDfVasWKHU1FSd\n",

"f/75uuCCC3TnnXfqyJEjdo4FAAAMZGvU5OTkaOLEidq2bZumTJmirKysBvt06tRJL774ojZv3qx1\n",

"69bpv//9rxYuXGjnWAAAwEC2RU1VVZVKSko0btw4SVJmZqY8Ho/Kysp89rvooovUo0cPSdKZZ56p\n",

"pKQklZeXN3nc2tpa1dTU+Nzq6+vtWgYAAGglbIsaj8ejqKgohYaGSpIcDodcLpfcbneT37Nnzx4t\n",

"WbJEV111VZP75OXlqWPHjj63NWvWBHx+AADQupw2FwrX1NTo6quv1p133qmLL764yf2mTp2qffv2\n",

"+dxSU1NP4aQAAOB0FGrXgWNiYlRRUaG6ujqFhobKsiy53W65XK4G++7fv1/Dhw/X6NGjlZube9zj\n",

"Op1OOZ1On20hISEBnR0AALQ+tj1T061bN/Xv31+LFi2SJBUWFio6Olrx8fE++x04cEDDhw/X8OHD\n",

"de+999o1DgAAMJytLz/l5+crPz9fiYmJmjlzpgoKCiRJ2dnZKioqkiQ9+eSTWrNmjZYuXaqkpCQl\n",

"JSXpwQcftHMsAABgINtefpKkXr16afXq1Q22z58/3/vne+65R/fcc4+dYwAAgF+B0+ZCYQAAgJNB\n",

"1AAAACMQNQAAwAhEDQAAMAJRAwAAjEDUAAAAIxA1AADACEQNAAAwAlEDAACMQNQAAAAjEDUAAMAI\n",

"RA0AADACUQMAAIxA1AAAACMQNQAAwAhEDQAAMAJRAwAAjEDUAAAAIxA1AADACEQNAAAwAlEDAACM\n",

"QNQAAAAjEDUAAMAIRA0AADACUQMAAIxA1AAAACMQNQAAwAhEDQAAMAJRAwAAjEDUAAAAIxA1AADA\n",

"CEQNAAAwAlEDAACMQNQAAAAjEDUAAMAIRA0AADACUQMAAIxA1AAAACMQNQAAwAhEDQAAMAJRAwAA\n",

"jEDUAAAAIxA1AADACEQNAAAwAlEDAACMQNQAAAAjEDUAAMAIRA0AADACUQMAAIxA1AAAACMQNQAA\n",

"wAhEDQAAMAJRAwAAjEDUAAAAIxA1AADACEQNAAAwAlEDAACMQNQAAAAjEDUAAMAIRA0AADACUQMA\n",

"AIxga9Rs375d6enpSkxMVEpKikpLSxvd7+mnn1ZCQoJ69uypCRMm6PDhw3aOBQAADGRr1OTk5Gji\n",

"xInatm2bpkyZoqysrAb77Ny5U9OmTdNHH32ksrIyVVZWau7cuXaOBQAADGRb1FRVVamkpETjxo2T\n",

"JGVmZsrj8aisrMxnvyVLlmjUqFGKjIyUw+HQpEmTtHjx4iaPW1tbq5qaGp9bfX29XcsAAACtRKhd\n",

"B/Z4PIqKilJo6NEf4XA45HK55Ha7FR8f793P7XYrNjbWez8uLk5ut7vJ4+bl5Wn69Ok+28477zzl\n",

"5uYGeAXS2IAf8aj6+npdcskMpaamKiQkxKafEjz19fVas2aNseuTzF/jr2F9UTauLzf3/YAf01/+\n",

"/hva9d87u/Df0Ybs+je06/FcX1+vrVu36vXXX5fT6QzIMW2LGrtMnTq1QcA4nc6A/YWcCjU1NerY\n",

"saPeeecdhYWFBXucgDN9fZL5a2R9rZ/pa2R9rd/Pa6ytrT39oyYmJkYVFRWqq6tTaGioLMuS2+2W\n",

"y+Xy2c/lcmnHjh3e++Xl5Q32OVZrCxgAAHBq2HZNTbdu3dS/f38tWrRIklRYWKjo6Gifl56ko9fa\n",

"FBUVac+ePbIsS3PmzNF1111n11gAAMBQtv72U35+vvLz85WYmKiZM2eqoKBAkpSdna2ioiJJUo8e\n",

"PTR9+nRdeumlio+PV9euXZWTk2PnWAAAwEC2XlPTq1cvrV69usH2+fPn+9yfMGGCJkyYYOcopxWn\n",

"06n77rvP2JfRTF+fZP4aWV/rZ/oaWV/rZ8caHZZlWQE7GgAAQJDwMQkAAMAIRA0AADACUQMAAIxA\n",

"1AAAACMQNTa4/fbbFRcXJ4fDofXr159wu3T04yF69eqlpKQkJSUl6aWXXjq1Q/uhsXUcPHhQY8aM\n",

"UWJiovr166eMjAyfz/mqqqrS8OHDlZCQoD59+mjVqlVBmv7EWrK+gQMH6txzz/X++z3++ONBmr55\n",

"mnosDhs2TH379lVSUpIuv/xyff75596vbd++Xenp6UpMTFRKSopKS0uDMHnztGR9rf0cPFZBQYEc\n",

"Dodee+0177bWdA5KLVtjazoPm1rf8R6HJpyDx1tfQM5BCwH34YcfWh6Px4qNjbU+//zzE263LKvR\n",

"baerxtbx008/WcuWLbOOHDliWZZlzZo1yxowYID3e26++WbrvvvusyzLstasWWN1797dOnTo0Cme\n",

"vHlasr4BAwZYr7766qkftoWaeiz+8MMP3j8vXbrU6tu3r/f+oEGDrIKCAsuyLOuVV16xLr744lM0\n",

"rf9asr7Wfg7+bOfOndYll1xipaWl+TwmW9M5aFktW2NrOg+bWt/xHocmnIPHW18gzkGeqbHBFVdc\n",

"oejo6GZvb20aW8eZZ56pkSNHyuFwSJLS0tJUXl7u/frLL7+sSZMmSZJSUlL0m9/8Rh9++OEpm9kf\n",

"LVlfa9PUYzE8PNz753379nnXW1VVpZKSEo0bN07S0XcC93g8Ps9WnU78XV9r09T6jhw5ouzsbM2a\n",

"NavBe3+0pnNQatkaWxN///fAlHPQbkTNaeTGG2/UhRdeqFtuuUV79+4N9jgn5cknn9To0aMlSd99\n",

"950OHz6syMhI79dP9Gnsp7tj1/ezu+66SxdeeKGuvfZaffXVV0Ga7OTdeOONiomJ0bRp0/Tcc89J\n",

"kjwej6KiohQaevT9Oh0Oh1wuV6v8N2xsfcd+rTWfg4899pguvfRSJScn+2w36Rxsao0/M+E8bOxx\n",

"aNo52NR5drLnIFFzmli1apW++OILffbZZ+rSpYtuuummYI/UYg899JDKysqUl5cX7FFs0dj6nnvu\n",

"OW3ZskVffPGFLr/8cl111VVBnPDkLFy4UB6PRzNmzNCUKVOCPU7ANbW+1n4Obtq0SYWFhbr33nuD\n",

"PYptTrRGE87D1v44PJHjrS8gaz+pF69wXE29Pnii1w2/+eYbq3379vYNFiCNreMf//iHlZyc7HPt\n",

"gmVZ1llnnWVVVFR476ekpFjFxcWnYMqW82d9v+R0Oq1vv/3WvuEC5ESPxTPPPNP69ttvrcrKSqtD\n",

"hw7W4cOHLcuyrCNHjljnnHOOtX379lM0acs0d32/1BrPwdmzZ1uRkZFWbGysFRsbazmdTqtr167W\n",

"7NmzLctqneegZfm3xl9qDefh8R6jxz4OTTwHj3eetfQc5Jma08CPP/6o6upq7/3FixfroosuCt5A\n",

"LfTYY49p8eLFKi4u9rl2QZL+8Ic/aM6cOZKktWvXavfu3RowYEAQpmy5ptZXV1enyspK7/3CwkKd\n",

"c845ioiICMKULVddXa1vvvnGe/+1115TRESEOnfurG7duql///5atGiRpKNrjI6OVnx8fLDG9dvx\n",

"1mfCOTh58mRVVFSovLxc5eXlSktL09y5czV58mRJZpyDx1ujCefh8R6HJpyDx1tfwM5BvzMIJzRx\n",

"4kSre/fuVkhIiNWtWzerZ8+ex92+Y8cOKykpybrwwgutPn36WKNGjbJ27twZxBUcX2Pr8Hg8liSr\n",

"R48eVr9+/ax+/fpZqamp3u/Zs2ePlZGRYcXHx1vnn3++tWLFiiCu4Pj8Xd+BAwes5ORkq0+fPlbf\n",

"vn2twYMHW+vXrw/yKo6vsTWWl5dbKSkp3nUMGTLE5/9hbdmyxUpLS7MSEhKs5ORk64svvgjeAk7A\n",

"3/WZcA7+0i9/E6g1nYOW5f8aW9t52Nj6TvQ4bO3n4PHWF6hzkA+0BAAARuDlJwAAYASiBgAAGIGo\n",

"AQAARiBqAACAEYgaAABgBKIGAAAYgagBAABGIGoAAIARiBoAAGAEogYAABjh/wEi991TLUH1hQAA\n",

"AABJRU5ErkJggg==\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-4aee5d16-90ec-4fa2-a34e-00f82e8db190\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-4aee5d16-90ec-4fa2-a34e-00f82e8db190\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x786710c6bf70>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">2-d distributions</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_3.plot(kind='scatter', x='Index', y='Height(Inches)', s=32, alpha=.8)\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-da44e749-a566-426e-a10e-729c338441bf\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAmlElEQVR4nO3df3BV9Z3/8dfNPclNmkggP0hsGBJhAxh+JLAQid0UxkArlhWX\n",

"VelK0FZq13Upy1KnyGwdtduSMot0+DEttJO62lgLVWqdVmFHjMgW+VWhK+iMk5AEgiT8iiHB5CT3\n",

"5nz/YLhfUwLeCzm5n5v7fMzckZx7cvM+Joc8Offccz2O4zgCAAAwRFykBwAAAPgs4gQAABiFOAEA\n",

"AEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFOAACAUaIyTtatWxfpEQAAgEuiMk4aGhoiPQIAAHBJ\n",

"VMYJAAAYvIgTAABgFOIEAAAYhTgBAABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAA\n",

"YBTiBINKZ3dAZ9ttdXYHIj0KAOA6WZEeAOgPZ9psVe2t1/YjzeroDigp3qs5E7JVXpKrjBRfpMcD\n",

"AISBIyeIemfabH3npUN6cd9xXbT9suI8umj7VbWvQUt+fUhn2+1IjwgACANxgqhXtbdeNafblJni\n",

"07DkBCX7LA1LTlBmik81p9tU9S7vYg0A0YQ4QVTr7A5o+5FmJVpeWd7eP86WN04+y6s3jjZxDgoA\n",

"RBHiBFGt3farozugBKvvH2WfFaeOroDabf8ATwYAuF7ECaJais9SUrxXXf6ePu+3/T1KSvAqxce5\n",

"3wAQLYgTRLXEeK/unJClTn9A/kDvQPEHemT7A5ozPluJ8d4ITQgACBf/nETUW1SSp311Lao53Saf\n",

"5ZXPipPtvxQm+cNvUnlJbqRHBACEgSMniHoZKT5tfGCyym/LVUqiJX+Po5RES+W35WrDA5O5zgkA\n",

"RBmOnGBQyEjxadnsMXp05mi1236l+CyeygGAKEWcYFBJjPcSJQAQ5XhaBwAAGIU4AQAARiFOAACA\n",

"UYgTAABgFOIEAAAYhTgBAABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAA\n",

"GIU4AQAARiFOAACAUYgTAABgFOIEAAAYhTgBAABGIU4AAIBRiBMAAGAU1+Lk3LlzKioqCt7GjBkj\n",

"y7J0/vx5rVq1SmPHjlVcXJxeffVVt0YAAABRyHLrgdPT03X48OHgx2vWrNGuXbuUlpamWbNm6etf\n",

"/7oefvhht748AACIUq7FyV+rrKxURUWFJKm4uDjkz7NtW7Zt91oWCAT6dTYAAGCOATnnZM+ePWpp\n",

"adHcuXPD/tyKigqlpqb2uu3fv9+FKQEAgAkGJE4qKyv14IMPyrLCP1CzcuVKtba29rqFc+QFAABE\n",

"F9ef1mlvb9fWrVt14MCB6/p8n88nn8/Xa5nX6+2P0QAAgIFcP3KyZcsWFRYWaty4cW5/KQAAMAi4\n",

"HieVlZVavHhxr2U//OEPNWLECL377rv61re+pREjRujMmTNujwIAAKKAx3EcJ9JDhGv58uVau3Zt\n",

"pMcAAAAu4AqxAADAKMQJAAAwCnECAACMQpwAAACjECcAAMAoxAkAADAKcQIAAIxCnAAAAKMQJwAA\n",

"wCjECQAAMApxAgAAjEKcAAAAoxAnAADAKMQJAAAwCnECAACMQpwAAACjECcAAMAoxAkAADAKcQIA\n",

"AIxCnAAAAKMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAnAADAKMQJAAAwCnECAACMQpwAAACjECcA\n",

"AMAoxAkAADAKcQIAAIxCnAAAAKMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAnAADAKMQJAAAwCnEC\n",

"AACMQpwAAACjECcAAMAoxAkAADAKcQIAAIxCnAAAAKMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAn\n",

"AADAKMQJAAAwimtxcu7cORUVFQVvY8aMkWVZOn/+vE6fPq0777xT+fn5mjBhgt555x23xgAAAFHG\n",

"cuuB09PTdfjw4eDHa9as0a5du5SWlqaHH35Y06dP1/bt23XgwAH9wz/8g+rq6hQfH+/WOAAAIEq4\n",

"Fid/rbKyUhUVFZKkrVu3qqamRpI0bdo0ffGLX9SuXbs0a9asKz7Ptm3Ztt1rWSAQcH9gAAAQEQNy\n",

"zsmePXvU0tKiuXPn6ty5c+ru7lZ2dnbw/ry8PB0/frzPz62oqFBqamqv2/79+wdibAAAEAEDEieV\n",

"lZV68MEHZVnhH6hZuXKlWltbe92Ki4tdmBIAAJjA9ad12tvbtXXrVh04cEDSpXNRLMtSU1NT8OhJ\n",

"fX29Ro4c2efn+3w++Xy+Xsu8Xq+7QwMAgIhx/cjJli1bVFhYqHHjxgWX3Xfffdq0aZMk6cCBAzp5\n",

"8qRmzJjh9igAACAKuH7kpLKyUo888kivZatXr9aiRYuUn5+vhIQEVVVV8UodAAAgaQDiZM+ePVcs\n",

"y8rK0v/8z/+4/aUBAEAU4gqxAADAKMQJAAAwCnECAACMQpwAAACjECcAAMAoxAkAADAKcQIAAIxC\n",

"nAAAAKMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAnAADAKMQJAAAwCnECAACMQpwAAACjECcAAMAo\n",

"xAkAADAKcQIAAIxCnAAAAKMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAnAIzR2R3Q2XZbnd2BSI8C\n",

"IIKsSA8AAGfabFXtrdf2I83q6A4oKd6rOROyVV6Sq4wUX6THAzDAOHICIKLOtNn6zkuH9OK+47po\n",

"+2XFeXTR9qtqX4OW/PqQzrbbkR4RwAAjTgBEVNXeetWcblNmik/DkhOU7LM0LDlBmSk+1ZxuU9W7\n",

"DZEeEcAAI04ARExnd0DbjzQr0fLK8vb+68jyxslnefXG0SbOQQFiDHECIGLabb86ugNKsPr+q8hn\n",

"xamjK6B22z/AkwGIJOIEQMSk+CwlxXvV5e/p837b36OkBK9SfJy7D8QS4gRAxCTGe3XnhCx1+gPy\n",

"B3oHij/QI9sf0Jzx2UqM90ZoQgCRwD9HAETUopI87atrUc3pNvksr3xWnGz/pTDJH36TyktyIz0i\n",

"gAHGkRMAEZWR4tPGByar/LZcpSRa8vc4Skm0VH5brjY8MJnrnAAxiCMnACIuI8WnZbPH6NGZo9Vu\n",

"+5Xis3gqB4hhxAkAYyTGe4kSANf/tE5XV1d/zgEAACApzDh5++239fWvf12ZmZlKTExUQkKCpkyZ\n",

"olWrVun8+fNuzQgAAGJIyHFy1113af369Zo/f77ee+892batc+fOadOmTfL7/brjjju0fft2N2cF\n",

"AAAxwOM4jhPKiu+//74mTpx41fu7u7tVV1enMWPG9NtwV7N8+XKtXbvW9a8DAAAGXshHTvoKE8dx\n",

"1NbWJkmKj48fkDABAACDW9gnxC5evFiffPKJurq6VFRUpKysLP30pz91YzYAABCDwo6TP//5zxo6\n",

"dKi2b9+uyZMnq6mpSZs2bXJjNgAAEIPCjpPLp6js3r1bc+fO1ZAhQ+T1cl0CAADQP8KOk+zsbP3L\n",

"v/yLfvvb32rWrFnq7u5WIBBwYzYAABCDwo6TF198UWPHjtVvfvMbDR06VCdPntTy5cvdmA0AAMSg\n",

"sOMkIyNDCxYsUGdnpyQpJydHDzzwQL8PBgAAYlPYcfLyyy9r+vTp+sY3viFJ+uCDD3TPPff081gA\n",

"ACBWhR0nFRUVeu+99zRs2DBJUmFhoRoaGvp9MAAAEJvCjhOv16v09PReyxISEvpc17ZtLVmyRPn5\n",

"+Zo4caLKy8slSdu3b9fUqVM1adIkTZ8+XX/5y1+uY3QAADAYWeF+wk033aTm5mZ5PB5J0s6dO5WW\n",

"ltbnuk888YQ8Ho8++ugjeTweNTU1qaWlRQsXLtQ777yj8ePHa/fu3Vq4cKGOHDlyY1sCAAAGhbDj\n",

"ZPXq1ZozZ46OHTumv/u7v1NdXZ3++Mc/XrHexYsXVVlZqcbGxmDIZGdn6+DBg0pPT9f48eMlSaWl\n",

"pTp+/Ljee+89TZky5QY3BwAARLuw42Tq1Kmqrq7Wnj175DiObr/9dg0dOvSK9Wpra5WWlqZVq1bp\n",

"zTffVFJSkp5++mlNnTpV586d0549e3T77bfrtddeU1tbm+rr6/uME9u2Zdt2r2VcVwUAgMEr7DiR\n",

"pNTUVM2ZM+ea6/j9fjU0NKigoEA//vGPdejQIc2ePVtHjx7Vyy+/rJUrV6q9vV0lJSUqKCiQZfU9\n",

"SkVFhZ555pley6ZPn349YwMAgCjgcS5fjz5E27dv17Jly3Ts2DEFAgE5jiOPx3PF0YyzZ88qKytL\n",

"XV1dwcvbT5s2TRUVFZo1a1ZwPdu2lZ2drQMHDuhv/uZvrvh6fR05efLJJ7Vu3bpwxgYAAFEi7Ffr\n",

"LF26VOvWrdPZs2d14cIFtbW16cKFC1esl5GRobKyMu3YsUOSVFdXp7q6Ot166606depUcL3//M//\n",

"1B133NFnmEiSz+fTkCFDet14Lx8AAAavsJ/WGTJkiL761a+GtO6mTZu0ePFirVixQnFxcdq8ebNy\n",

"cnL0yCOPaPfu3fL7/SopKVFlZWXYgwMAgMEp7DiZO3euXn311ZCuCjtq1ChVV1dfsfwXv/hFuF8W\n",

"AADEiJDjZNiwYfJ4PHIcR62trUpKSpLP5wuec3L+/Hk35wQAADEi5Dg5fPiwi2MAAABcEnKc5Obm\n",

"SpKOHz+u4cOHKzExUZLU2dmpM2fOuDMdAACIOWG/Wufee+/t9bHjOFcsAwAAuF5hx0lXV1fwqIkk\n",

"JSUlXXEdEgAAgOsVdpx4PB6dPn06+HFTU5PCvI4bAADAVYX9UuKlS5eqpKREixYtkiRVVVXpqaee\n",

"6vfBAABAbAo7Tr75zW/qlltu0euvvy5Jeu6551RaWtrvgwEAgNh0XW/8N3PmTM2cObOfRwEAALiO\n",

"OKmvr9fq1atVW1srv98fXP7WW2/162AAACA2hR0n999/v8rKyrRkyRLegA8AAPS7sOOks7NTFRUV\n",

"bswCAAAQ/kuJJ0yYoOPHj7sxCwAAQPhHTs6cOaPCwkKVlJT0uhjbtm3b+nUwAAAQm8KOk/LycpWX\n",

"l7sxCwAAQPhx8tBDD7kxBwAAgKQw4mT58uXXvH/t2rU3PAwAAEDIcZKamurmHAAAAJLCiBPePwcA\n",

"AAyEkF9KvG/fvmve39HRoQ8++OCGBwIAALEt5Dh59tlnNXv2bD333HP64IMPdO7cOZ08eVJvvfWW\n",

"vve976mkpETNzc1uzgoAAGJAyE/rbN26VQcOHNDmzZv1ox/9SI2NjUpOTtakSZP0j//4j/rTn/6k\n",

"5ORkN2cFAAAxIKyXEk+bNk3Tpk1zaxYAAIDwL1//2GOPhbQMAADgeoQdJ3v37r1i2Z49e/plGAAA\n",

"gJCf1tmyZYt+85vfqK6uTvPnzw8ub21tVUpKiivDAQCA2BNynIwbN07z5s3Te++9p3nz5gWXDxky\n",

"RGVlZa4MBwAAYk/IcVJYWKjCwkJ97WtfU2ZmppszAQCAGBb2G//Fx8dr9erVqq2tld/vDy7/5S9/\n",

"2a+DAQCA2BR2nNx7773KzMxUSUmJvF6vGzMBAIAYFnacnDp1Sm+++aYbswAAAIT/UuLRo0frk08+\n",

"cWEUAACAMI6cLF++XJL0hS98QVOmTNGdd96pxMTE4P1r167t/+kAAEDMCTlOUlNTg/+99dZbXRsI\n",

"AADEtpDj5KmnnnJzDgAAAEnXcULsD37wgyuWDR06VCUlJbwpIADEuM7ugNptv1J8lhLjeUUnrk/Y\n",

"cfLhhx/q7bff1ty5c+XxePSHP/xB06dP18aNG7VkyRItXbrUjTkBAAY702aram+9th9pVkd3QEnx\n",

"Xs2ZkK3yklxlpPgiPR6iTNhx0tLSosOHDysrK0uS1NzcrEWLFmnv3r0qLS0lTgAgxpxps/Wdlw6p\n",

"5nSbEi2vEqw4XbT9qtrXoL1157XxgckECsIS9kuJGxsbg2EiSVlZWfr444+Vlpam+Pj4fh0OAGC+\n",

"qr31qjndpswUn4YlJyjZZ2lYcoIyU3yqOd2mqncbIj0iokzYcZKTk6NnnnlGJ06c0IkTJ/SDH/xA\n",

"X/ziFxUIBOTxeNyYEQBgqM7ugLYfaVai5ZXl7f0rxfLGyWd59cbRJnV2ByI0IaJR2HHy/PPP6+jR\n",

"oyoqKlJRUZGOHDmi//7v/1Z3d7deeOEFN2YEABiq3farozugBKvvXyc+K04dXZdOkgVCFfY5J9nZ\n",

"2dq6dWuf902cOPGGBwIARI8Un6WkeK8u2n4l93Faie3vUUqipRRf2L9uEMNC/mnZtWuXZsyYodde\n",

"e63P++++++5+GwoAEB0S4726c0KWXtx3XP5AT6+ndvyBHtn+gO4bP4KXFSMsIcdJVVWVZsyYoZ/8\n",

"5CdX3OfxeIgTAIhRi0rytK+uRTWn2+SzvPJZcbL9l8Ikf/hNKi/JjfSIiDIex3GcSA8RruXLl/Ne\n",

"PgBgkLPttqrebdAbR5vU0RVQUoJXc8ZznRNcn7CfBPT7/Vq3bp1qa2v105/+VLW1tWpoaNAdd9zh\n",

"xnwAgCiQkeLTstlj9OjM0VwhFjcs7DhZsmSJAoGA/vd//1eSlJ6ergULFujgwYP9PhwAILokxnuJ\n",

"EtywsONk7969Onz4sCZPnizp0vvqdHd39/tgAAAgNoV9nZPExMReHwcCAfX09PTbQAAAILaFHSeT\n",

"Jk1SVVWVenp6VFNTo3/+53/WzJkzXRgNAADEorDjZO3atdq9e7eampr0pS99SV6vV6tXr+5zXdu2\n",

"tWTJEuXn52vixIkqLy+XJL3++uuaMmWKioqKNGHCBD3//PM3thUAAGDQCPmlxH998bXLn3b5/XT6\n",

"us7Jv//7v8vv92v9+vXyeDxqampSVlaW0tPT9fbbb2vSpEmqr6/XuHHjdObMGd10000hDc1LiQEA\n",

"GLxCPiH2sxdf+/Of/6ypU6f2CpS/jpOLFy+qsrJSjY2NwYDJzs6W4zjyeDz65JNPJEkXLlxQenq6\n",

"fL6+Xwdv27Zs2+61LBDgDaQAABisQo6T6urq4J8nT56st95665rr19bWKi0tTatWrdKbb76ppKQk\n",

"Pf300yorK9OWLVs0f/58JScnq6WlRdu2bVNCQkKfj1NRUaFnnnmm17Lp06eHOjYAAIgyYZ9zIv3/\n",

"p3Kuxe/3q6GhQQUFBTp48KDWr1+vBQsWqLm5WT/84Q+1bds2NTQ0aOfOnVq0aJHOnj3b5+OsXLlS\n",

"ra2tvW7FxcXXMzYAAIgC1xUnoRg5cqTi4uK0cOFCSZeOttxyyy361a9+pY8//lhf/vKXJUnTpk3T\n",

"iBEjdOjQoT4fx+fzaciQIb1uXi8X+AEAYLAKOU7+7//+L3jr6OjQ+++/32vZX8vIyFBZWZl27Ngh\n",

"Saqrq1NdXZ3uu+8+nTp1Sh9++KEkqaamRrW1tRo7dmw/bRIAAIhmIZ9zMm/evF4ff/YEWI/Ho2PH\n",

"jl3xOZs2bdLixYu1YsUKxcXFafPmzcrNzdXPf/5z3X///YqLi1NPT482btyokSNH3sBmAACAwYJ3\n",

"JQYAAEZx7ZwTAACA60GcAAAAoxAnAAAgqLM7oLPttjq7I3fB05BPiAUAAIPXmTZbVXvrtf1Iszq6\n",

"A0qK92rOhGyVl+QqI6Xvq7i7hSMnAADEuDNttr7z0iG9uO+4Ltp+WXEeXbT9qtrXoCW/PqSz7fbn\n",

"P0g/Ik4AAIhxVXvrVXO6TZkpPg1LTlCyz9Kw5ARlpvhUc7pNVe82DOg8xAkAADGsszug7UealWh5\n",

"ZXl7Z4HljZPP8uqNo00Deg4KcQIAQAxrt/3q6A4oweo7CXxWnDq6Amq3/QM2E3ECAEAMS/FZSor3\n",

"qsvf0+f9tr9HSQlepfgG7jU0xAkAADEsMd6rOydkqdMfkD/QO1D8gR7Z/oDmjM9WYvzAvekuLyUG\n",

"ACDGLSrJ0766FtWcbpPP8spnxcn2XwqT/OE3qbwkd0Dn4cgJAAAxLiPFp40PTFb5bblKSbTk73GU\n",

"kmip/LZcbXhg8oBf54QjJwAAQBkpPi2bPUaPzhytdtuvFJ81oE/lfBZxAgAAghLjvRGLkst4WgcA\n",

"ABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFOAACAUYgTAABgFOIEAAAYhTgBAABGIU4A\n",

"AIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFOAACAUYgTAABgFOIE\n",

"AAAYhTgBAABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFO\n",

"AACAUYgTAABgFOIEAAAYhTgBAABGIU4AAIBRLDcf3LZtffe739WOHTuUmJiowsJCrVu3TmVlZcF1\n",

"Pv30Ux07dkynT59WWlqam+MAAIAo4GqcPPHEE/J4PProo4/k8XjU1NSk9PR0HT58OLjOmjVrtGvX\n",

"LsIEAABIcjFOLl68qMrKSjU2Nsrj8UiSsrOzr1ivsrJSFRUVbo0BAACijGvnnNTW1iotLU2rVq3S\n",

"1KlTVVpaqp07d/ZaZ8+ePWppadHcuXOv+ji2bevChQu9boFAwK2xAQBAhLkWJ36/Xw0NDSooKNDB\n",

"gwe1fv16LViwQM3NzcF1Kisr9eCDD8qyrn4Ap6KiQqmpqb1u+/fvd2tsAAAQYR7HcRw3Hvjs2bPK\n",

"yspSV1eXvF6vJGnatGmqqKjQrFmz1N7erptvvlkHDhzQuHHjrvo4tm3Ltu1ey5588kmtW7fOjbEB\n",

"AECEuXbkJCMjQ2VlZdqxY4ckqa6uTnV1dbr11lslSVu2bFFhYeE1w0SSfD6fhgwZ0ut2OXYAAMDg\n",

"4+qrdTZt2qTFixdrxYoViouL0+bNm5WTkyPp0lM6jzzyiJtfHgAARCFX42TUqFGqrq7u8749e/a4\n",

"+aUBAECU4gqxAADAKMQJAAAwCnECAACMQpwAAACjECcAAMAoxAkAADAKcQIAAIxCnAAAAKMQJwAA\n",

"wCjECQAAMApxAgAAjEKcAAAAoxAnAADAKMQJAAAwCnECAACMQpwAAACjECcAAMAoxAkAADAKcQIA\n",

"AIxCnAAAAKMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAnAADAKMQJAAAwCnECAACMQpwAAACjECcA\n",

"AMAoxAkAADAKcQIAAIxCnAAAAKMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAnAADAKMQJAAAwCnEC\n",

"AACMQpwAAACjECcAAMAoxAkAADAKcQIAAIxCnAAAAKMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAn\n",

"AADAKMQJAAAwiqtxYtu2lixZovz8fE2cOFHl5eXXXA4AAGC5+eBPPPGEPB6PPvroI3k8HjU1NV1z\n",

"OQAAgGtxcvHiRVVWVqqxsVEej0eSlJ2dfdXlV2Pbtmzb7rUsEAi4NTYAAIgw157Wqa2tVVpamlat\n",

"WqWpU6eqtLRUO3fuvOryq6moqFBqamqv2/79+90aGwAARJhrceL3+9XQ0KCCggIdPHhQ69ev14IF\n",

"C9TR0dHn8ubm5j4fZ+XKlWptbe11Ky4udmtsAAAQYa49rTNy5EjFxcVp4cKFkqTJkyfrlltu0YkT\n",

"J/pc/v777ysrK+uKx/H5fPL5fL2Web1et8YGAAAR5tqRk4yMDJWVlWnHjh2SpLq6OtXV1amkpKTP\n",

"5bfeeqtbowAAgCji6qt1Nm3apMWLF2vFihWKi4vT5s2blZOTc9XlAAAArsbJqFGjVF1dHfJyAAAA\n",

"rhALAACMQpwAAACjECef0dkd0Nl2W53dXOQNAIBIcfWck2hxps1W1d56bT/SrI7ugJLivZozIVvl\n",

"JbnKSPF9/gMAAIB+E/NHTs602frOS4f04r7jumj7ZcV5dNH2q2pfg5b8+pDOttuf/yAAAKDfxHyc\n",

"VO2tV83pNmWm+DQsOUHJPkvDkhOUmeJTzek2Vb3bEOkRAQCIKTEdJ53dAW0/0qxEyyvL2/t/heWN\n",

"k8/y6o2jTZyDAgDAAIrpOGm3/eroDijB6vt/g8+KU0dXQO22f4AnAwAgdsV0nKT4LCXFe9Xl7+nz\n",

"ftvfo6QEr1J8nDcMAMBAiek4SYz36s4JWer0B+QP9A4Uf6BHtj+gOeOzlRjPGw0CADBQYv6QwKKS\n",

"PO2ra1HN6Tb5LK98Vpxs/6UwyR9+k8pLciM9IgAAMSWmj5xIUkaKTxsfmKzy23KVkmjJ3+MoJdFS\n",

"+W252vDAZK5zAgDAAIv5IyfSpUBZNnuMHp05Wu22Xyk+i6dyAACIEOLkMxLjvUQJAAARFvNP6wAA\n",

"ALMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAnAADAKMQJAAAwCnECAACMQpwAAACjECcAAMAoHsdx\n",

"nEgPEa758+crLy+v3x83EAho//79Ki4ultc7+C5jP9i3Txr828j2Rb/Bvo1sX/Rzcxtzc3P1b//2\n",

"b5+7XlTGiVsuXLig1NRUtba2asiQIZEep98N9u2TBv82sn3Rb7BvI9sX/UzYRp7WAQAARiFOAACA\n",

"UYgTAABgFOLkM3w+n5566in5fL5Ij+KKwb590uDfRrYv+g32bWT7op8J28gJsQAAwCgcOQEAAEYh\n",

"TgAAgFGIEwAAYJSYi5OlS5cqLy9PHo9Hhw8fvup6lZWVys/P1+jRo/XII4+ou7t74Ia8QaFs49tv\n",

"v62kpCQVFRUFbx0dHQM76HXq7OzUPffcozFjxqiwsFCzZ89WTU1Nn+v+4Q9/0Lhx45Sfn6/58+fr\n",

"woULAzxt+ELdvvr6enm93l7fw9ra2ghMHL6vfOUrmjRpkoqKilRaWqpDhw71uV4074ehbGM074eX\n",

"Pffcc/J4PHr11Vf7vD8a98HPutb2RfM+KEl5eXkaO3ZscPYtW7b0uV5E9kMnxuzatcs5ceKEk5ub\n",

"6xw6dKjPdY4dO+bcfPPNzqlTp5yenh7n7//+752NGzcO7KA3IJRtrK6udgoLCwd0rv7S0dHh/PGP\n",

"f3R6enocx3GcDRs2ODNmzLhivba2Nmf48OHOhx9+6DiO4/zrv/6r8/jjjw/kqNcl1O2rq6tzUlNT\n",

"B3a4ftLS0hL887Zt25xJkyZdsU6074ehbGM074eOc+lnsKSkxJk+fbrzu9/97or7o3UfvOzzti+a\n",

"90HHca75O+KySO2HMXfk5Mtf/rJGjBhxzXVefvll3X333crOzpbH49Gjjz6ql156aYAmvHGhbGM0\n",

"S0xM1F133SWPxyNJmj59uurr669Y74033tDkyZM1btw4SdJjjz0WFd/HULcvmg0dOjT459bW1uC2\n",

"fla074ehbGM06+np0be+9S1t2LDhqi85jdZ9UApt+2JBpPZDy/WvEIWOHz+u3Nzc4Md5eXk6fvx4\n",

"BCdyR21traZMmSKv16tvfvObeuyxxyI90nVZt26d5s2bd8Xyvr6Pp06dkt/vl2VFz4/+1bZPki5e\n",

"vKhp06YpEAjonnvu0X/8x39EzZuRPfjgg6qurpYkvf7661fcPxj2w8/bRil698O1a9fqS1/6kv72\n",

"b//2qutE8z4YyvZJ0b0PSpd+Rh3HUXFxsX784x8rMzOz1/2R2g/N/umAa6ZMmaLGxkalpqaqsbFR\n",

"d911lzIyMnT//fdHerSwrFq1SjU1Ndq5c2ekR3HFtbbv5ptv1smTJzV8+HCdP39eCxYs0LPPPqvv\n",

"fe97EZg0fC+88IIk6fnnn9eKFSuu+ss7mn3eNkbrfnjkyBG98soreueddyI9iitC3b5o3wffeecd\n",

"jRw5Ut3d3fr+97+vhx56yJj9MOae1gnFyJEj1dDQEPy4vr5eI0eOjOBE/W/IkCFKTU2VJI0YMUL/\n",

"9E//pN27d0d4qvCsWbNG27Zt0xtvvKEvfOELV9zf1/fx5ptvNv5fbJd93vb5fD4NHz5ckpSWlqaH\n",

"H3446r6HkvTQQw+purpa586d67V8MO2HV9vGaN0Pd+/erfr6euXn5ysvL0979+7Vt7/9bf3sZz/r\n",

"tV607oOhbl+074OX96f4+HgtW7asz9kjth+6flaLoa51IlBtbe0VJwBt2LBhYAfsB9faxo8//tgJ\n",

"BAKO4zjOhQsXnNtvv92prKwcwOluzLPPPutMmTLFOX/+/FXXuXDhgpOZmdnrZLzvfve7AzXiDQll\n",

"+5qbm52uri7HcRyns7PTuffee50nn3xyoEa8bi0tLc7JkyeDH//ud79zcnJygicAXxbN+2Go2xjt\n",

"++FlM2bM6POE0WjeBz/ratsXrfug4zhOe3t7r5O2n332Wae0tPSK9SK1H8ZcnHz72992cnJyHK/X\n",

"6wwfPtwZPXq04ziOs3jxYuf3v/99cL2f//znzqhRo5xRo0Y5Dz/8cPAHMBqEso0bNmxwCgoKnEmT\n",

"JjkFBQXOU089dcVfnKY6ceKEI8kZNWqUU1hY6BQWFjrFxcWO4zjOk08+6fzsZz8Lrvv73//eGTt2\n",

"rDN69Ghn3rx5zieffBKpsUMW6va98sorzvjx44PfwyVLljidnZ2RHD0k9fX1zrRp05wJEyY4kyZN\n",

"csrKyoIRPVj2w1C3MZr3w8/67C/vwbAP/rWrbV+07oOOcyk6ioqKnIkTJzoTJkxw7r77bqeurs5x\n",

"HDP2Q95bBwAAGIVzTgAAgFGIEwAAYBTiBAAAGIU4AeCKvLy8a75/VV8ef/xxPf30067MAyB6ECcA\n",

"AMAoxAkAV82cOVOPP/64SktLNXr0aD366KPB+06dOqWvfvWrKigo0KxZs9TY2Bi8r7u7W0888YSK\n",

"i4tVVFSk+++/Xy0tLTpz5kzwwljSpff+KCwsjLp38wVwdcQJANfV1taqurpaR44c0Y4dO/Tuu+9K\n",

"kpYuXari4mJ98MEHev7553tdpv+//uu/lJycrP379+vw4cOaOHGivv/97yszM1O/+tWvtHDhQu3f\n",

"v1/Lli3Tb3/7WyUlJUVq8wD0M7OvIQxgUFiwYIEsy5JlWSoqKlJtba1KSkq0c+dOrVmzRpKUk5Oj\n",

"u+++O/g5r776qlpbW/XKK69Ikrq6upSXlydJKi0t1eLFi3X77bfrhRde0JgxYwZ8mwC4hzgB4LrE\n",

"xMTgn71er/x+f5/reTye4J8dx9GGDRv0la98pc91Dx06pMzMTJ04caJ/hwUQcTytAyBiZs2apV/+\n",

"8peSLp1/8tprrwXvu+eee/STn/xEn376qSTp008/1dGjRyVJGzduVEtLi/7yl79o8+bN+tOf/jTw\n",

"wwNwDUdOAETMunXr9I1vfEMFBQXKycnRHXfcEbxvxYoVsm1bt912W/CIyuVla9as0b59+zR8+HBV\n",

"VVWpvLxcBw4cUHp6eqQ2BUA/4r11AACAUXhaBwAAGIU4AQAARiFOAACAUYgTAABgFOIEAAAYhTgB\n",

"AABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEb5fyC+LmtGoGxFAAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-da44e749-a566-426e-a10e-729c338441bf\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-da44e749-a566-426e-a10e-729c338441bf\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_4.plot(kind='scatter', x='Height(Inches)', y='Weight(Pounds)', s=32, alpha=.8)\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-7ff88f78-279d-479c-b90f-62ad43100aee\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAu+ElEQVR4nO3de3RTdaL+/ydNSgq0FKFARaARaXGwLeFqq1AuioA6gweKOFiB\n",

"UYaCMj0MnqNwjsqMM0OHNVgWOssBPSOKVSyKw3KJclTuHOWmBMQLWqAUsBesUFpsQ5Pm9wdf8zM2\n",

"LQ2SJhver7X2knw+2btP96L1Ye+dvU0ej8cjAAAAA4gIdQAAAIDmorgAAADDoLgAAADDoLgAAADD\n",

"oLgAAADDoLgAAADDoLgAAADDoLgAAADDoLgAAADDCGpxycnJkc1mk8lkksPh8I7bbDb17t1bdrtd\n",

"drtdBQUFzZoDAABXNkswN56ZmalHHnlEQ4YMaTBXUFAgu93ud72m5gAAwJUrqMUlIyMjmJsHAABX\n",

"mJBd4zJlyhSlpKTogQce0MmTJ5s992NOp1NnzpzxWZ566qlgRwcAACESkuKydetW7d+/X5988oni\n",

"4uI0derUZs39VG5urmJjY32WN954oyW+BQAAEAImj8fjCfYXsdlsWrt2rd/rVkpKSpSUlKSqqqqA\n",

"5qTzR1ycTqfP2OOPP66lS5dektwAACC8BPUaF3/Onj2ruro6tW/fXpK0atUq9evX74Jz/litVlmt\n",

"Vp8xs9kclNwAACD0glpcsrOztW7dOpWWlmr06NGKiYnRe++9pwkTJsjtdsvj8ahnz55auXKlJKms\n",

"rKzROQAAgBY5VdSS5s6dq7y8vFDHAAAAQcCdcwEAgGFQXAAAgGFQXAAAgGFQXAAAgGFQXAAAgGFQ\n",

"XAAAgGFQXAAgzNTWufVttVO1de5QRwHCTovfORcA4N/JKqfydxRp/YEy1dS51TrSrLHJ8cpKT1Bc\n",

"tPXCGwCuABxxAYAwcLLKqd+t2qtXdhbrrNMlS4RJZ50u5e88qtmv7tW31c4LbwS4AlBcACAM5O8o\n",

"UmF5lTpFW3VV21Zqa7Xoqrat1CnaqsLyKuV/dDTUEYGwQHEBgBCrrXNr/YEyRVnMsph9fy1bzBGy\n",

"Wsx697NSrnkBRHEBgJCrdrpUU+dWK4v/X8lWS4RqzrlV7XS1cDIg/FBcACDEoq0WtY4065yr3u+8\n",

"01Wv1q3MirbyeQqA4gIAIRYVadaY5C6qdbnlcvuWF5e7Xk6XW2NviFdUpDlECYHwQX0HgDBwX7pN\n",

"O4+cUmF5lawWs6yWCDld50tLYucYZaUnhDoiEBY44gIAYSAu2qq/T+6nrBsTFB1lkaveo+goi7Ju\n",

"TNAzk/txHxfg/+GICwCEibhoq+aMStLM4dep2ulStNXC6SHgJyguABBmoiLNFBagEZwqAgAAhkFx\n",

"AQAAhkFxAQAAhkFxAQAAhkFxAQAAhkFxAQAAhkFxAQAAhkFxAQAAhkFxAQAAhkFxAQAAhkFxAQAA\n",

"hkFxAQAAhkFxAQAAhkFxAQAAhkFxAQAAhhHU4pKTkyObzSaTySSHw+Edt9ls6t27t+x2u+x2uwoK\n",

"CrxzX3/9tW666SYlJSVp0KBB+uyzz4IZEQAAGEhQi0tmZqa2b9+uhISEBnMFBQVyOBxyOByaNGmS\n",

"dzw7O1szZszQV199pUcffVTTpk0LZkQAAGAgQS0uGRkZ6tatW7PfX15erj179igrK0uSNGHCBB07\n",

"dkyFhYV+3+90OnXmzBmfxe12X5LsAAAg/ITsGpcpU6YoJSVFDzzwgE6ePClJOnbsmK6++mpZLBZJ\n",

"kslkUo8ePVRcXOx3G7m5uYqNjfVZdu3a1WLfAwAAaFkhKS5bt27V/v379cknnyguLk5Tp069qO3M\n",

"nz9flZWVPsvgwYMvcVoAABAuLKH4oj169JAkRUZGas6cOUpKSpIkde/eXSUlJXK5XLJYLPJ4PCou\n",

"Lva+/6esVqusVqvPmNlsDm54AAAQMi1+xOXs2bM6ffq09/WqVavUr18/SVLnzp3Vv39/5efnS5LW\n",

"rFmjbt26qVevXi0dEwAAhKGgHnHJzs7WunXrVFpaqtGjRysmJkbvvfeeJkyYILfbLY/Ho549e2rl\n",

"ypXedZYvX65p06Zp4cKFateunVasWBHMiAAAwEBMHo/HE+oQl9LcuXOVl5cX6hgAACAIuHMuAAAw\n",

"DIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoL\n",

"AAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAw\n",

"DIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoLAAAwDIoL\n",

"AAAwDIoLAAAwDIoLAAAwDIoLAAAwjKAWl5ycHNlsNplMJjkcjgbzK1askMlk0tq1a71jw4cP17XX\n",

"Xiu73S673a4lS5YEMyIAADAQSzA3npmZqUceeURDhgxpMFdUVKTnn39eaWlpDeaWLFmiu+66K5jR\n",

"AACAAQX1iEtGRoa6devWYLy+vl7Tp0/XM888I6vVetHbdzqdOnPmjM/idrt/TmQAABDGQnKNS15e\n",

"nm6++WYNGDDA7/y8efOUkpKiSZMm6fDhw41uJzc3V7GxsT7Lrl27ghUbAACEWIsXlwMHDmjNmjV6\n",

"7LHH/M6//PLL+vLLL7V//34NHTpUd955Z6Pbmj9/viorK32WwYMHBys60KJq69z6ttqp2jqOIgLA\n",

"D4J6jYs/27ZtU1FRkRITEyVJpaWlmjFjhkpKSjRr1ix1795dkmQymTR79mz9x3/8hyoqKtSxY8cG\n",

"27JarQ1ONZnN5uB/E0AQnaxyKn9HkdYfKFNNnVutI80amxyvrPQExUVf/KlVALgctPgRl1mzZqmk\n",

"pERFRUUqKipSWlqannvuOc2aNUsul0tlZWXe965Zs0ZdunTxW1qAy9HJKqd+t2qvXtlZrLNOlywR\n",

"Jp11upS/86hmv7pX31Y7Qx0RAEIqqEdcsrOztW7dOpWWlmr06NGKiYlRYWFho+93Op2644475HQ6\n",

"FRERobi4OL311lvBjAiElfwdRSosr1KnaKss5vP/rmhrlVzuehWWVyn/o6OaMyopxCkBIHSCWlyW\n",

"L19+wfds3rzZ++e2bdtqz549QUwEhK/aOrfWHyhTlMXsLS0/sJgjZLWY9e5npZo5/DpFRXJKFMCV\n",

"iTvnAmGi2ulSTZ1brSz+fyytlgjVnHOr2ulq4WQAED4oLkCYiLZa1DrSrHOuer/zTle9WrcyK9ra\n",

"4tfUA0DYoLgAYSIq0qwxyV1U63LL5fYtLy53vZwut8beEM9pIgBXNP7pBoSR+9Jt2nnklArLq2S1\n",

"mGW1RMjpOl9aEjvHKCs9IdQRASCkOOIChJG4aKv+Prmfsm5MUHSURa56j6KjLMq6MUHPTO7HfVwA\n",

"XPE44gKEmbhoq+aMStLM4dep2ulStNXC6SEA+H8oLkCYioo0U1gA4Cc4VQQAAAyD4gIAAAyD4gIA\n",

"AAyD4gIAAAyD4gIAAAyD4gKgSbV1bn1b7VRtnTvUUQCAj0MD8O9klVP5O4q0/kCZaurcah1p1tjk\n",

"eGWlJ3AjPAAhwxEXAA2crHLqd6v26pWdxTrrdMkSYdJZp0v5O49q9qt79W21M9QRAVyhKC4AGsjf\n",

"UaTC8ip1irbqqrat1NZq0VVtW6lTtFWF5VXK/+hoqCMCuEJRXAD4qK1za/2BMkVZzLKYfX9FWMwR\n",

"slrMevezUq55ARASFBcAPqqdLtXUudXK4v/Xg9USoZpzblU7XS2cDAAoLgB+ItpqUetIs8656v3O\n",

"O131at3KrGgr1/YDaHkUFwA+oiLNGpPcRbUut1xu3/LictfL6XJr7A3xPAASQEjwTyYADdyXbtPO\n",

"I6dUWF4lq8UsqyVCTtf50pLYOUZZ6QmhjgjgCsURFwANxEVb9ffJ/ZR1Y4Kioyxy1XsUHWVR1o0J\n",

"emZyP+7jAiBkOOICwK+4aKvmjErSzOHXqdrpUrTVwukhACFHcQHQpKhIM4UFQNjgVBEAADAMigsA\n",

"ADAMigsAADAMigsAADAMigsAADAMigsAADAMigsAADAMigsAADAMigsAADCMoBaXnJwc2Ww2mUwm\n",

"ORyOBvMrVqyQyWTS2rVrvWPl5eUaM2aMEhMTlZycrK1btwYzIgAAMJCgFpfMzExt375dCQkNnyRb\n",

"VFSk559/XmlpaT7j8+bNU1pamr7++mutWLFCkydPVl1dXTBjAgAAgwhqccnIyFC3bt0ajNfX12v6\n",

"9Ol65plnZLX6PmV29erVmjlzpiRp0KBB6tq1q7Zs2eJ3+06nU2fOnPFZ3G73pf9GAABAWAjJNS55\n",

"eXm6+eabNWDAAJ/xiooK1dXVKT4+3jtms9lUXFzsdzu5ubmKjY31WXbt2hXU7AAAIHRavLgcOHBA\n",

"a9as0WOPPfaztzV//nxVVlb6LIMHD74EKQEAQDiytPQX3LZtm4qKipSYmChJKi0t1YwZM1RSUqJZ\n",

"s2bJYrGotLTUe9SlqKhIPXr08Lstq9Xa4FST2WwO7jcAAABCpsWPuMyaNUslJSUqKipSUVGR0tLS\n",

"9Nxzz2nWrFmSpIkTJ2rZsmWSpN27d+vEiRMaNmxYS8cEAABhKKjFJTs7W926ddPx48c1evRo9erV\n",

"64LrLFq0SB9++KESExM1bdo05efnKzIyMpgxAQCAQZg8Ho8n1CEupblz5yovLy/UMQAAQBBw51wA\n",

"AGAYFBcAAGAYFBcAAGAYFBcAAGAYFBcAAGAYFBcAAGAYFBcAAGAYFBcAAGAYFBcAAGAYFBcAAGAY\n",

"FBcAAGAYFBcAAGAYF1Vczp07d6lzAAAAXFCzi8vmzZt1zz33qFOnToqKilKrVq3Uv39/LVy4UN99\n",

"910wMwIAAEhqZnG5/fbb9fTTT2v8+PH65JNP5HQ6VVFRoWXLlsnlcmnkyJFav359sLMCAIArnMnj\n",

"8Xgu9KZPP/1UKSkpjc7X1dXpyJEjSkpKuqThLsbcuXOVl5cX6hgAACAImnXExV9p8Xg8qqqqkiRF\n",

"RkaGRWkBAACXt4Auzn3ggQd0+vRpnTt3Tna7XV26dNGzzz4brGwAAAA+AiouH3/8sdq3b6/169er\n",

"X79+Ki0t1bJly4KVDQAAwEdAxeWHy2G2bdumO++8U+3atZPZbA5KMAAAEF5q69z6ttqp2jp3yDJY\n",

"AnlzfHy8Zs2apXfffVf//d//rbq6OrndoQsPAACC72SVU/k7irT+QJlq6txqHWnW2OR4ZaUnKC7a\n",

"2qJZAjri8sorr6h379567bXX1L59e504cUJz584NVjYAABBiJ6uc+t2qvXplZ7HOOl2yRJh01ulS\n",

"/s6jmv3qXn1b7WzRPAEdcYmLi9OcOXO8r202m6ZNm3aJIwEAgHCRv6NIheVV6hRtlcV8/nhHW6vk\n",

"ctersLxK+R8d1ZxRLffJ4mYVl2uvvVYmk6nR+cOHD1+yQAAAIDzU1rm1/kCZoixmb2n5gcUcIavF\n",

"rHc/K9XM4dcpKrJlrnltVnF5++23JUmvvfaaioqKlJ2dLUl6/vnnlZCQELx0AAAgZKqdLtXUudXK\n",

"4v/KEqslQjXn3Kp2usKruNxwww2SpPXr12v37t3e8ZtvvlmDBw/Wk08+GZx0AAAgZKKtFrWONOus\n",

"06W2fq7BdbrqFR1lUbQ1oCtPfpaALs6trKzU2bNnva/Pnj2rysrKSx4KAACEXlSkWWOSu6jW5ZbL\n",

"Xe8z53LXy+lya+wN8S12tEUK8OLcyZMnKy0tTXfffbck6fXXX1dWVlZQggEAgNC7L92mnUdOqbC8\n",

"SlaLWVZLhJyu86UlsXOMstJb9pKRZj1k8cfWrVunjRs3SpJuvfVWjR07NijBLhYPWQQA4NL6ttqp\n",

"/I+O6t3PSlVzzq3Wrcwae0No7uMScHEJdxQXAACCo7bu/IW40VZLi54e+rGAThUVFRVp0aJFOnTo\n",

"kFwul3f8hyMwAADg8hUVaQ5ZYflBQMXl7rvv1i233KLZs2fzjCIAANDiAioutbW1ys3NDVYWAACA\n",

"JgX0cejk5GQVFxc3+/05OTmy2WwymUxyOBze8dtuu02pqamy2+0aOnSo9u7d652z2Wzq3bu37Ha7\n",

"7Ha7CgoKAokIAAAuYwEdcTl58qT69u2r9PR0RUVFecfffPNNv+/PzMzUI488oiFDhviMr169Wu3b\n",

"t5ck/etf/9K0adO0b98+73xBQYHsdnsg0QAAwBUgoOKSlZUV0H1bMjIy/I7/UFqk8ze1a+o5SE1x\n",

"Op1yOn2fSul2uy9qWwAAIPwFVFymTp16yb7wlClTtGnTJknSO++802DO4/Fo8ODB+utf/6pOnTr5\n",

"3UZubq7++Mc/+oylpaVdsowAACC8BHQfl/vvv9/v+AsvvNDkejabTWvXrvV7+uell15SQUGBt7wU\n",

"FxerR48eqqur02OPPaZPP/20QbH5gb8jLo8//riWLl3ajO8GAAAYTUBHXAYMGOD9c21trdasWaP+\n",

"/fv/rABTp07VzJkzVVFRoY4dO6pHjx6SpMjISM2ZM0dJSUmNrmu1WmW1+t6xj49pAwBw+QqouDz0\n",

"0EM+r2fNmqVf/epXAX3B06dP6/vvv1fXrl0lSWvXrlXHjh3VoUMHnT17VnV1dd5rYFatWqV+/foF\n",

"tH0AAHD5+lnPoY6KitLx48cbnc/Ozta6detUWlqq0aNHKyYmRhs2bNDEiRNVU1OjiIgIderUSW+/\n",

"/bZMJpPKyso0YcIEud1ueTwe9ezZUytXrvw5EQEAwGUkoOIyd+5c75/dbrf27Nmj5OTkRt+/fPly\n",

"v+O7du3yO96zZ0+fe7oAAAD8WEDFJTY29v9f0WJRTk6Oxo8ff8lDAQAA+BNQcVmwYEGwcgAAAFxQ\n",

"QLf8r6qq0kMPPaSkpCQlJSVp9uzZqqqqClY2AAAAHwEVlwcffFAul0urV6/W66+/rvr6ej344IPB\n",

"ygYAAOAjoFNF+/fv93mm0LPPPqu+ffte8lAAAAD+BHTExe12+5waqq6u5tlAAACgxQT8rKK0tDRN\n",

"mjRJ0vmnPP/mN78JSjAAAICfCqi4/Od//qdSUlL0wQcfSJIWL16sMWPGBCUYAADATzWruFRWVurP\n",

"f/6zDh48qAEDBugvf/lLg2cEAQAABFuzrnGZOXOmDh8+rLFjx+rDDz/Uf/3XfwU7FwAAQAPNOuKy\n",

"f/9+HThwQCaTSdOmTdOQIUOCnQsAAKCBZh1xsVqtMplMkqTWrVsHNRAAAEBjmnXE5fjx4z4PWDx2\n",

"7JjP67y8vEufDAAA4CeaVVweeuihJl8DAAC0hGYVFx6uCAAAwkGzrnHZuXNnk/M1NTX6/PPPL0kg\n",

"AACAxjSruDz11FMaNWqUVqxYoc8//1wVFRU6ceKENm7cqEceeUTp6ekqKysLdlYAAHCFa9apotWr\n",

"V2v37t1avny5/vKXv+j48eNq27atUlNTNWHCBP3f//2f2rZtG+ysAADgCtfsW/4PGjRIgwYNCmYW\n",

"AACAJgX0dOgHH3ywWWMAAADBEFBx2bFjR4OxDz/88JKFAQAAaEqzThUVFBTotdde05EjRzR+/Hjv\n",

"eGVlpaKjo4MWDgAA4MeaVVyuv/56jRs3Tp988onGjRvnHW/Xrp1uueWWoIUDAAD4sWYVl759+6pv\n",

"376644471KlTp2BnAgAA8KvZnyqSpMjISC1atEiHDh2Sy+Xyjr/wwguXPBgAAMBPBVRcMjMz1alT\n",

"J6Wnp8tsNgcrEwAAgF8BFZeSkhJ98MEHwcoCAADQpIA+Dn3dddfp9OnTQYoCAADQtGYdcZk7d64k\n",

"qU2bNurfv7/GjBmjqKgo73xeXl5w0gEAAPxIs4pLbGys97+/+MUvghoIAACgMc0qLgsWLAh2DgAA\n",

"gAsK6OLcJ598ssFY+/btlZ6ezgMYAQBA0AV0ce4XX3yhf/zjHzp27JiOHz+uZcuWafPmzbr33nv1\n",

"9NNPBysjAACApACLy6lTp+RwOPT888/rueee0969e1VdXa0dO3Zo+fLlDd6fk5Mjm80mk8kkh8Ph\n",

"Hb/tttuUmpoqu92uoUOHau/evd65r7/+WjfddJOSkpI0aNAgffbZZxf/3QEAgMtKQMXl+PHj6tKl\n",

"i/d1ly5d9M0336hDhw6KjIxs8P7MzExt375dCQkJPuOrV6/W/v375XA4NHfuXE2bNs07l52drRkz\n",

"Zuirr77So48+6jMHAACubAEVl2uuuUZ//OMfdezYMR07dkxPPvmkunbtKrfbLZPJ1OD9GRkZ6tat\n",

"W4Px9u3be/9cWVnpXbe8vFx79uxRVlaWJGnChAk6duyYCgsL/eZxOp06c+aMz+J2uwP5lgAAgIEE\n",

"VFxeeuklffbZZ7Lb7bLb7Tpw4IBefPFF1dXVaeXKlQF94SlTpqh79+56/PHH9fLLL0uSjh07pquv\n",

"vloWy/lrhk0mk3r06KHi4mK/28jNzVVsbKzPsmvXroByAAAA4wjoU0Xx8fFavXq137mUlJSAvvAP\n",

"Reell17So48+qnfeeSeg9SVp/vz53pvj/eDxxx8PeDsAAMAYmlVctmzZomHDhumtt97yO/+rX/3q\n",

"ogNMnTpVM2fOVEVFhbp3766SkhK5XC5ZLBZ5PB4VFxerR48efte1Wq2yWq0+Yzz8EQCAy1ezikt+\n",

"fr6GDRumJUuWNJgzmUwBFZfTp0/r+++/V9euXSVJa9euVceOHdWhQweZTCb1799f+fn5mjZtmtas\n",

"WaNu3bqpV69ezd4+AAC4fJk8Ho8nWBvPzs7WunXrVFpaqo4dOyomJkYbNmzQxIkTVVNTo4iICHXq\n",

"1EmLFy+W3W6XJB08eFDTpk1TRUWF2rVrpxUrVgR0Gmru3Lk8OwkAgMtUQMXF5XJp6dKlOnTokJ59\n",

"9lkdOnRIR48e1ciRI4OZMSAUFwAALl8BXZw7e/Zsud1ubd++XZLUsWNHTZo0SXv27AlKOAAAgB8L\n",

"qLjs2LFDDodD/fr1k3T+fix1dXVBCQYAAPBTAd3HJSoqyue12+1WfX39JQ0EAADQmICKS2pqqvLz\n",

"81VfX6/CwkLNnDlTw4cPD1I0AAAAX80qLgsWLNDWrVu1ZMkSbdu2TaWlpbr55ptlMpn017/+NdgZ\n",

"AQAAJDXzGpfy8nLNmDFDx44dU3p6unJycjRy5EgNHjyYG74BAIAW06wjLv/4xz/05ZdfqrCwUA88\n",

"8ICKi4s1bdo0XXXVVbrjjjuCnREAAEBSgJ8quvrqqzVhwgRdffXVio+P16pVq+RwOIIUDQAAwFez\n",

"isvWrVu1efNmbdq0SSdOnFBaWpoyMjK0bt06JSYmBjsjAACApGYWl+HDhystLU1PPPGExowZE+xM\n",

"AAAAfjXrGpetW7fq9ttv1+LFi9WrVy9NnjxZzz33nL766qtg5wMAAPAK+CGL586d086dO7Vp0ya9\n",

"+uqrqq6u1vHjx4OVL2A8qwgAgMtXQBfnfvPNN9q0aZM2b96sjRs3qry8XEOGDAlWNgAAAB/NKi6/\n",

"/e1vtWXLFn3zzTdKT0/XiBEjlJ+fr0GDBsliCaj7AAAAXLRmtY7u3bvrn//8p9LS0hQZGRnsTAAA\n",

"AH41q7g88cQTwc4BAABwQQE9ZBEAACCUKC4AAMAwKC4AAMAwKC4AAMAwKC4AAMAwKC4AAMAwKC4A\n",

"AMAwKC4AAMAwKC4AAMAwKC4AAMAwKC4AAMAwKC4AAMAwKC4AAMAwKC4AAMAwKC4AAMAwKC4AAMAw\n",

"KC4AAMAwglpccnJyZLPZZDKZ5HA4JEm1tbW66667lJSUpL59+2rUqFEqLCz0rjN8+HBde+21stvt\n",

"stvtWrJkSTAjAgAAAwlqccnMzNT27duVkJDgMz5jxgwdPHhQ+/bt07hx4zR9+nSf+SVLlsjhcMjh\n",

"cOj3v/99MCMCAAADCWpxycjIULdu3XzGoqKidPvtt8tkMkmS0tLSVFRUdFHbdzqdOnPmjM/idrt/\n",

"bmwAABCmQn6Ny9KlSzVu3DifsXnz5iklJUWTJk3S4cOHG103NzdXsbGxPsuuXbuCHRkAAIRISIvL\n",

"woULVVhYqNzcXO/Yyy+/rC+//FL79+/X0KFDdeeddza6/vz581VZWemzDB48uCWiAwCAEAhZcVm8\n",

"eLHefPNNvfvuu2rTpo13vHv37pIkk8mk2bNn6/Dhw6qoqPC7DavVqnbt2vksZrO5RfIDAICWF5Li\n",

"kpeXp1WrVun9999X+/btveMul0tlZWXe12vWrFGXLl3UsWPHEKQEAADhxhLMjWdnZ2vdunUqLS3V\n",

"6NGjFRMTo82bN+vhhx9Wz549NWLECEnnj5zs3LlTTqdTd9xxh5xOpyIiIhQXF6e33normBEBAICB\n",

"BLW4LF++3O+4x+PxO962bVvt2bMnmJEAAICBhfxTRQAAAM1FcQEAAIZBcQEAAIZBcQEAAIZBcQEA\n",

"AIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZB\n",

"cQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEA\n",

"AIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIZBcQEAAIYR\n",

"1OKSk5Mjm80mk8kkh8MhSaqtrdVdd92lpKQk9e3bV6NGjVJhYaF3nfLyco0ZM0aJiYlKTk7W1q1b\n",

"gxkRAAAYSFCLS2ZmprZv366EhASf8RkzZujgwYPat2+fxo0bp+nTp3vn5s2bp7S0NH399ddasWKF\n",

"Jk+erLq6umDGBAAABhHU4pKRkaFu3br5jEVFRen222+XyWSSJKWlpamoqMg7v3r1as2cOVOSNGjQ\n",

"IHXt2lVbtmzxu32n06kzZ874LG63OzjfDAAACLmQX+OydOlSjRs3TpJUUVGhuro6xcfHe+dtNpuK\n",

"i4v9rpubm6vY2FifZdeuXS2SGwAAtLyQFpeFCxeqsLBQubm5F7X+/PnzVVlZ6bMMHjz4EqcEAADh\n",

"whKqL7x48WK9+eab+uCDD9SmTRtJUseOHWWxWFRaWuo96lJUVKQePXr43YbVapXVavUZM5vNwQ0O\n",

"AABCJiRHXPLy8rRq1Sq9//77at++vc/cxIkTtWzZMknS7t27deLECQ0bNiwEKQEAQLgJ6hGX7Oxs\n",

"rVu3TqWlpRo9erRiYmK0efNmPfzww+rZs6dGjBgh6fyRk507d0qSFi1apPvuu0+JiYlq1aqV8vPz\n",

"FRkZGcyYAADAIIJaXJYvX+533OPxNLpOly5d9N577wUrEgAAMLCQf6oIAACguSguAADAMCguAADA\n",

"MCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCgu\n",

"AADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADA\n",

"MCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCguAADAMCgu\n",

"AADAMCguAADAMIJaXHJycmSz2WQymeRwOC44Lkk2m029e/eW3W6X3W5XQUFBMCMCAAADCWpxyczM\n",

"1Pbt25WQkNCs8R8UFBTI4XDI4XBo0qRJwYwIAAAMxBLMjWdkZAQ0Hiin0ymn0+kz5na7L8m2AQBA\n",

"+AnLa1ymTJmilJQUPfDAAzp58mSj78vNzVVsbKzPsmvXrhZMCgAAWlLYFZetW7dq//79+uSTTxQX\n",

"F6epU6c2+t758+ersrLSZxk8eHALpgUAAC0pqKeKLkaPHj0kSZGRkZozZ46SkpIafa/VapXVavUZ\n",

"M5vNQc0HAABCJ6yOuJw9e1anT5/2vl61apX69esXukAAACCsBLW4ZGdnq1u3bjp+/LhGjx6tXr16\n",

"NTleVlamESNGKDU1VSkpKdqyZYtWrlwZzIgAAMBATB6PxxPqEJfS3LlzlZeXF+oYAAAgCMLqVBEA\n",

"AEBTKC4AAMAwKC4AAMAwKC4AAMAwKC4AAMAwKC4AAMAwKC7NVFvn1rfVTtXW8RBHAABCJexu+R9u\n",

"TlY5lb+jSOsPlKmmzq3WkWaNTY5XVnqC4qKtF94AAAC4ZDji0oSTVU79btVevbKzWGedLlkiTDrr\n",

"dCl/51HNfnWvvq12hjoiAABXFIpLE/J3FKmwvEqdoq26qm0rtbVadFXbVuoUbVVheZXyPzoa6ogA\n",

"AFxRKC6NqK1za/2BMkVZzLKYfXeTxRwhq8Wsdz8r5ZoXAABaEMWlEdVOl2rq3Gpl8b+LrJYI1Zxz\n",

"q9rpauFkAABcuSgujYi2WtQ60qxzrnq/805XvVq3MivayvXNAAC0FIpLI6IizRqT3EW1Lrdcbt/y\n",

"4nLXy+lya+wN8YqKNIcoIQAAVx4OFzThvnSbdh45pcLyKlktZlktEXK6zpeWxM4xykpPCHVEAACu\n",

"KBxxaUJctFV/n9xPWTcmKDrKIle9R9FRFmXdmKBnJvfjPi4AALQwjrhcQFy0VXNGJWnm8OtU7XQp\n",

"2mrh9BAAACFCcWmmqEgzhQUAgBDjVBEAADAMigsAADAMigsAADAMigsAADAMigsAADAMigsAADAM\n",

"igsAADAMigsAADAMigsAADAMigsAADAMk8fj8YQ6xKU0fvx42Wy2UMfwy+12a9euXRo8eLDMZh4f\n",

"0Fzst4vHvrt47LuLw367eFf6vktISNC///u/X/B9l11xCWdnzpxRbGysKisr1a5du1DHMQz228Vj\n",

"31089t3FYb9dPPZd83CqCAAAGAbFBQAAGAbFBQAAGAbFpQVZrVYtWLBAVqs11FEMhf128dh3F499\n",

"d3HYbxePfdc8XJwLAAAMgyMuAADAMCguAADAMCguAADAMCguQeR0OjV79mwlJiYqJSVFWVlZTY7j\n",

"PH/7p6KiQna73bskJSXJYrHou+++C3XcsNLY36133nlH/fv3l91uV3Jysl566aUQJw0/je279evX\n",

"a+DAgUpNTVVaWpr27dsX4qTho6mfy/Lyco0ZM0aJiYlKTk7W1q1bQx03rDS17xYuXKjevXsrIiJC\n",

"a9euDXXUsGMJdYDL2bx582QymfTVV1/JZDKptLS0yXGc52//dOzYUQ6Hw/uexYsXa8uWLerQoUPo\n",

"goYhf/vO4/EoKytLmzdvVmpqqoqKinT99ddr/PjxiomJCXXksOFv3506dUr33nuvtm7dqhtuuEHb\n",

"tm3TvffeqwMHDoQ6blho6ufy/vvvV1pamtavX6/du3fr3/7t33TkyBFFRkaGLnAYaWrf3Xrrrbrn\n",

"nnt0//33hy5gOPMgKKqrqz0xMTGeysrKZo3jvObun+uvv97zr3/9q2VCGURj+66+vt7ToUMHz5Yt\n",

"Wzwej8ezb98+T9euXT1OpzMUMcNSY/tu9+7dnsTERJ+xmJgYz8cff9yS8Qzjxz+Xbdu29ZSUlHjn\n",

"Bg0a5Hn//fdDlCz8+fudNmzYMH7P+cGpoiA5dOiQOnTooIULF2rgwIEaOnSoNmzY0Og4zmvO/vnw\n",

"ww916tQp3XnnnSFKGZ4a23cmk0kFBQUaP368EhISNGTIEL300ktq1apVqCOHjcb2XWJioioqKvTh\n",

"hx9Kkt566y1VVVWpqKgotIHD0I9/LisqKlRXV6f4+HjvvM1mU3FxcQgThi9+pwWG4hIkLpdLR48e\n",

"VZ8+fbRnzx49/fTTmjRpkmpqavyOl5WVhTpyWGhsv/14//zzn//UlClTZLFwpvPHmtp3f/7zn/Xm\n",

"m2/q6NGj2rBhg+677z59++23oY4cNhrbd7W1tXrjjTc0f/58DRgwQO+995769OnD3z0/+Lm8eOy7\n",

"AIX6kM/l6uTJk56IiAiPy+Xyjg0cONDz+uuv+x3nEOp5je23H/ZPVVWVJzo62vPFF1+EKmLYamzf\n",

"/e1vf2twumPgwIGe9957r6Ujhq0L/b37QW1trad9+/aer7/+uqUjhjV/P5dt2rThVFEzNPU7jVNF\n",

"/nHEJUji4uJ0yy236H//938lSUeOHNGRI0eUnp7ud/wXv/hFKOOGjcb22w/7p6CgQH379tX1118f\n",

"yphhqbF9N3HiRJWUlOiLL76QJBUWFurQoUPq3bt3KOOGlab+3pWUlHjf96c//UkjR45Ur169QhU1\n",

"LPn7uZw4caKWLVsmSdq9e7dOnDihYcOGhSpi2OJ32kUIdXO6nB06dMgzfPhwT3Jysic1NdXzxhtv\n",

"NDmO85raP+np6Z4XXnghhOnCW2P77tVXX/WOJScne1555ZUQJw0/je276dOne3r37u257rrrPFlZ\n",

"WZ5Tp06FNmgY8vdzWVpa6hk1apSnV69enj59+ng2btwYonThzd+++9Of/uS55pprPK1atfJ07NjR\n",

"c80113jKy8tDlDD88KwiAABgGJwqAgAAhkFxAQAAhkFxAeBls9l87uYpScOHD7/gbcenT5+uTZs2\n",

"XXD7f/jDHzRnzhy/cw6HQ6+99lqD8YkTJ+qjjz664PrNUVRUpPbt21/0+j+1f/9+jR079pJtD8CF\n",

"UVwA/Gz/8z//oxEjRvysbfgrLrt27dJ3332n9PT0n7XtYElNTZXVatXGjRtDHQW4YlBcADRLVVWV\n",

"fvvb32rw4MFKTU3VjBkzdO7cOUm+R2VKSkp02223qU+fPrrtttt0zz336A9/+IN3OyUlJfrlL3+p\n",

"Pn36aOTIkd4H8j3xxBPatGmT7Ha7Zs6cKUlavny5Jk+e7DfPiy++qFtvvVW//vWvlZKSooEDB+rw\n",

"4cPe+RUrVshut6tv374aOHCgz91uFyxYoAEDBqhXr1565513vOO7d+/WyJEjNXDgQPXr10+vv/66\n",

"JOnkyZO67bbblJKSotTUVP3mN7/xrvPrX/9ay5cv/1n7FkDzUVwA+Jg0aZLPU2v37NkjSXr44Yc1\n",

"dOhQ7dq1S/v27VN9fb2WLl3aYP2cnBylp6fr888/18qVK7V582af+Z07d+rFF1/U559/rs6dO2v5\n",

"8uXq3LmznnzySY0YMUIOh8N7/4/NmzfrxhtvbDTr7t27tXDhQn366ae69dZbtWjRIu96Tz75pN59\n",

"913t27dPW7duVefOnSVJlZWVSk1N1ccff6y///3v+v3vfy9JOn36tGbMmKFXXnlFe/bs0fvvv6+H\n",

"H35YJ06cUH5+vq699lp9+umn2r9/v5566ilvhvT0dB7bAbQg7i8MwEdBQYHsdrv39fDhwyVJa9eu\n",

"1UcffaS8vDxJUk1Njcxmc4P1N2zYoMWLF0uS4uPjGzx/ZcyYMerYsaOk8//T//TTTxvNcvz4cXXp\n",

"0qXR+fT0dF177bXePz/zzDOSpHXr1um+++7T1VdfLUlq06aNd52oqCiNHz/eu86hQ4cknX9ezOHD\n",

"hxtcs3Lw4EGlpaVpyZIlevjhh5WRkaExY8Z45+Pj41VRUaHa2lpFRUU1mhXApUFxAdAsHo9Ha9as\n",

"UVJSUkDrmUwmn9c//p+72WyWy+VqdN02bdqotra20flAtvUDq9XqzWQ2m+V2uyWd//5uuOEG7wMV\n",

"f8rhcOiDDz7Qm2++qccff1x79+6V2WxWbW2tzGYzD60EWginigA0y1133aVFixZ5y8GpU6dUWFjY\n",

"4H0jR47Uiy++KEkqKyvT22+/3aztt2vXTpWVlT5jqampOnjwYMBZf/nLXyo/P997u/7vv/9e33//\n",

"fZPr3HTTTTpy5Ig++OAD75jD4dC5c+d05MgRRUdH6+6779Yzzzyjr776StXV1ZKkL774QsnJyYqI\n",

"4Ncp0BL4SQPQLEuWLFHr1q1lt9uVmpqqW265xeeC1x8sXbpU27ZtU58+fXTvvffqxhtvbNZHkG+5\n",

"5RY5nU6lpqZ6L87NzMz0Pj8oEBkZGVqwYIFGjx6tvn37atiwYTp58mST61x11VVat26dFi5cqL59\n",

"+6pPnz6aN2+e6uvrtXnzZg0YMEB2u1033XST/va3vyk2NlaStH79emVmZgacEcDF4Zb/AC6pmpoa\n",

"RUZGymKxqKKiQmlpacrPz2/yItvGVFdX66abbtJHH32ktm3bBiHtz3Pu3DkNHDhQGzduVFxcXKjj\n",

"AFcEiguAS2r//v2aMmWKPB6Pzp07pxkzZng/uXMxNmzYoC5duig5OfkSprw0Dh48qEOHDun2228P\n",

"dRTgikFxAQAAhsE1LgAAwDAoLgAAwDAoLgAAwDAoLgAAwDAoLgAAwDAoLgAAwDAoLgAAwDAoLgAA\n",

"wDAoLgAAwDD+P6NLdNBnbJVKAAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-7ff88f78-279d-479c-b90f-62ad43100aee\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-7ff88f78-279d-479c-b90f-62ad43100aee\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x7867130f7130>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">Time series</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"import seaborn as sns\n",

"def \_plot\_series(series, series\_name, series\_index=0):\n",

" palette = list(sns.palettes.mpl\_palette('Dark2'))\n",

" xs = series['Index']\n",

" ys = series['Height(Inches)']\n",

" \n",

" plt.plot(xs, ys, label=series\_name, color=palette[series\_index % len(palette)])\n",

"\n",

"fig, ax = plt.subplots(figsize=(10, 5.2), layout='constrained')\n",

"df\_sorted = \_df\_5.sort\_values('Index', ascending=True)\n",

"\_plot\_series(df\_sorted, '')\n",

"sns.despine(fig=fig, ax=ax)\n",

"plt.xlabel('Index')\n",

"\_ = plt.ylabel('Height(Inches)')"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-9a355b1e-4c79-4629-8309-6a80c347b5d5\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAABrlElEQVR4nO3dd3RVZd728euc9B5CQkILIUAINaGDVAXpAmJBBcHeRUedUZ+p\n",

"zjyvzjzjoJRRcAYVxIIdlCodhdA7hJJGAiSk957z/pEQiaAmkJN9TvL9rJUlOS1X1pacXPzue2+T\n",

"xWKxCAAAAAAA2A2z0QEAAAAAAEDdUOYBAAAAALAzlHkAAAAAAOwMZR4AAAAAADtDmQcAAAAAwM5Q\n",

"5gEAAAAAsDOUeQAAAAAA7AxlHgAAAAAAO2OXZX7u3LlGRwAAAAAAwDB2WeYTEhKMjgAAAAAAgGHs\n",

"sswDAAAAANCUUeYBAAAAALAzlHkAAAAAAOwMZR4AAAAAADtDmQcAAAAAwM5Q5gEAAAAAsDOUeQAA\n",

"AAAA7AxlHgAAAAAAO0OZBwAAAADAzlDmAQAAAACwM5R5AAAAAADsDGUeAAAAAAA7Q5kHAAAAAMDO\n",

"UOYBAAAAALAzlHkAAAAAAOwMZR4AAAAAADtDmQcAAAAAwM5Q5gEAAAAAsDOUeQAAAAAA7AxlHoBd\n",

"+9ue1Xpo4wdKyE03OgoAAADQYByNDgAA12pncqwWHd0mSfrhwhn9c8jtmhjSw+BUAAAAgPUxmQdg\n",

"t944sEGS5OnkotzSYj22+UP9z86vVVRWanAyAAAAwLoo8wDsUlRyrHYkx8rJ7KD1k5/Rkz1GSJKW\n",

"Rkdp0qq3FJOdamxAAAAAwIoo8wDs0hsHN0qS7g7rp2AvP73cd6w+uPl+NXf10PGMCxq3cr6+iDlg\n",

"cEoAAADAOijzAOzOruQ4/XAhRk5mh+qJvCTd2Kaz1k1+RoOCQlVQVqJnti3X899/poLSEuPCAgAA\n",

"AFZAmQdgdy5N5ad16qvWnr417gty99YnYx7Sc5GjZJJJy0/v04RvFig6M9mApAAAAIB1UOYB2JU9\n",

"KfH6/sIZOZkd9FTPEVd9jIPZrOd6jdInYx9SoJuXTmdf1IRvFuijU7tlsVgaNjAAAABgBZR5AHbl\n",

"0lT+zo591Maz2S8+dnDLDlo3+RkNbx2m4vIy/e6HL/XUtk+UW1LUEFEBAAAAq6HMA7Abe1MStO38\n",

"aTmazD87lf8pfzdPfXDzfXq5z1g5mMxaEXtI41bO15G0c9YNCwAAAFgRZR6A3XjjYOV15e/s1Fdt\n",

"vfxq/Tyzyawne47QF+MeVSsPH8Xnpmvyqrf03vEdLLsHAACAXaLMA7AL+y4maGvVVP7pWk7lf6pv\n",

"YDutm/yMRrftopKKcv1x10o9vGmZsooL6jcsAAAAYGWUeQB2YU7VXvk7OvWp01T+p5q5uGvxyJn6\n",

"S/+JcjI7aO3ZYxq7cp72XTxbX1EBAAAAq6PMA7B5+y6e1dZzp6qm8jde9+uZTCY91G2Ivp7wuNp5\n",

"+SkpL0u3rV6ohUe2qcJSUQ+JAQAAAOuizAOweZf2yt/WsbeCr2Mq/1MR/m20ZtJs3RLSU2WWCv3v\n",

"3tW6b8MSZRTl19vXAAAAAKyBMg/Aph1ITdSWc6fkYDJrdsT1T+V/ytvZVW+NuFt/H3SrXBwctSnp\n",

"pG5eMVdRybH1/rUAAACA+kKZB2DTLk3lb+/YS+28mlvla5hMJs0IH6BvJj6pDj4BSinI0Z1r/6O5\n",

"BzeqvIJl9wAAALA9lHkANutAaqI2JZ2Ug8msp3veZPWv19WvpVbf8pRu79BbFRaL/nngO01f/64u\n",

"FuRa/WsDAAAAdUGZB2Cz3qw6g/1tHXopxNs6U/mf8nBy0ZvD7tQbQ+6Qm6OTvr9wRqNXzNW2c6cb\n",

"5OsDAAAAtUGZB2CTDqYmamNSdOVU3gp75X/NHZ36aPUtTyu8WZDSivI0ff27+se+dSqrKG/wLAAA\n",

"AMBPUeYB2KQ3D1VO5ad2iFR7b39DMnTybaFvJj6pGZ0HyCKL5h/erDvX/kfn87IMyQMAAABcQpkH\n",

"YHMOpyVpQ2K0zCZTg+yV/yVujk76+w236q3hd8vTyUW7U+I1euU8bUyMNjQXAAAAmjbKPACb80bV\n",

"XvlbQyMV6mPMVP6nJoVGaM2kp9WzeWtlFRdo1ob39bfdq1RSXmZ0NAAAADRBlHkANuVI2jl9l3hC\n",

"ZpNJz0QYO5X/qfbe/vpqwuN6sOtgSdKiY9s1dfUinc3NMDgZAAAAmhrKPACbcum68lNCIxXqE2Bw\n",

"miu5ODjqlQG36L833SsfZ1cdTEvU2JXztCr+iNHRAAAA0IRQ5gHYjKPp57TeRqfyPzW2XTetm/yM\n",

"+gQEK6ekSI9u/lC/37lCRWWlRkcDAABAE0CZB2AzLu2Vn9w+Qh1scCr/U208m+nz8Y/qiR7DJUlL\n",

"ondq8qq3FJudanAyAAAANHaUeQA24Vj6ea07e1wm2f5U/nJOZgf9T99x+uDm++Xn4qFjGRc0buV8\n",

"fRVz0OhoAAAAaMQo8wBsQvVUPjRCHX1bGJym7m5s01nrpzyjgUHtlV9Woqe3faIXvv9chWUlRkcD\n",

"AABAI0SZB2C44xnntfbsMbubyv9UkLu3lo95WL+JHCmTTPrk9F5N+GaBTmamGB0NAAAAjQxlHoDh\n",

"Lk3lJ7XvqU52OJW/nIPZrOd73axPxjyoFm5eOpV1URO+WaBPTu2RxWIxOh4AAAAaCco8AEMdz7ig\n",

"NQlVU/lI+53K/9TgVh21fvIzGt6qk4rKS/XCD1/o6W3LlVdabHQ0AAAANAKUeQCGerNqKn9L+x4K\n",

"8w00OE398nfz1Aej79dLfcbKwWTW17EHNW7lfB1NP2d0NAAAANg5yjwAw5zISNbqhKNVe+VHGh3H\n",

"Kswms57qOUKfj3tELd19FJeTpknfvqX3T+xk2T0AAACuGWUegGHmHqqcyk8M6aHOzRrXVP6n+gWG\n",

"aP3k2bq5bReVVJTrD1Er9MjmZcouLjQ6GgAAAOwQZR6AIaIzk/Vt/BFJalR75X9JM1cPvTtypv7S\n",

"f6KczA5ak3BMY1fO0/7Us0ZHAwAAgJ2hzAMwxNyDmyRVTuXDmwUZnKbhmEwmPdRtiL4a/5iCPf2U\n",

"mJepqasWatHRbaqwVBgdDwAAAHbCamU+PT1dkZGR1R9hYWFydHRURkaGXn31VXXu3Flms1lff/21\n",

"tSIAsFEnM1N+nMo30r3yvyYyoK3WTp6tCSE9VGap0N/2rNb9G5Yqoyjf6GgAAACwA1Yr882bN9fB\n",

"gwerPx555BGNGzdOfn5+GjVqlNasWaNhw4ZZ68sDsGFzD22URRaNb9ddXfyazlT+p7ydXbVwxD16\n",

"bdAUuTg4amNStEavmKtdyXFGRwMAAICNa7Bl9osXL9aDDz4oSerfv79CQ0Nr9bzi4mLl5OTU+Cgv\n",

"L7dmVABWdCorRd/EVU7ln41smlP5y5lMJt0bPlDfTHxCod7+Si7I0R1r39G8Q5tUXsGyewAAAFxd\n",

"g5T5HTt2KDMzUxMnTqzzc1977TX5+PjU+Ni9e7cVUgJoCHMPbpJFFo1r101d/VoaHcdmdPVrpTWT\n",

"ntbUDr1UYbHo//av14zv3tXFglyjowEAAMAGNUiZX7x4sWbOnClHR8c6P/fll19WdnZ2jY/+/ftb\n",

"ISUAazuddVEr4w5Lkn7DVP4KHk4umjv0Ts0ZcrvcHJ20/fwZjVk5V9vPnzY6GgAAAGxM3dt1HeXl\n",

"5enTTz/Vnj17run5Li4ucnFxqXGbg4NDfUQD0MDmHqqcyo8N7qaufq2MjmOTTCaT7uzUV5EBbfX4\n",

"5o90MitF96x7V7MjbtRvIkfK0czPPwAAADTAZH758uWKiIhQeHi4tb8UABt2JuuiVsQeksRUvjbC\n",

"fAP17S1P6p6w/rLIormHNmna2v/ofH620dEAAABgA6xe5i8/8d0l//u//6s2bdpo586deuihh9Sm\n",

"TRulpqZaOwoAA12ayo8J7qpuzZnK14abo7P+b/BULRh+lzwcnbUrJV5jVszVxsRoo6MBAADAYCaL\n",

"xWIxOkRdPffcc5ozZ47RMQDUUkx2qm78ao4qLBatnfS0ujdvbXQkuxObnaYntnykoxnnJUmPdh+m\n",

"F3uPlrOD1XdLAQAAwAY12KXpADRdcw9tUoXFotFtu1Dkr1Goj79WTHxC93e5QZK06Og23bZmkRJz\n",

"MwxOBgAAACNQ5gFYVWx2qr6OPShJ+k3kKGPD2DkXB0f9beAk/eemGfJxdtWB1ESNWTlPq+OPGh0N\n",

"AAAADYwyD8CqLk3lb27bRT38mcrXh3HtumvtpNnqFdBWOSVFemTzMv0haoWKykqNjgYAAIAGQpkH\n",

"YDWx2Wn6qnoqzxns61NbLz99Of4xPdZ9mCTp/RM7NWXV24rNTjM4GQAAABoCZR6A1cw/XDmVH9U2\n",

"XD392xgdp9FxMjvoD/3Ga+nN98vPxUNHM85r3Mp51dsaAAAA0HhR5gFYRVxOmr6MOSiJvfLWdlOb\n",

"zlo3ebYGBLZXflmJntr6iX77wxcqLCsxOhoAAACshDIPwCrmH9qsckuFRrYJVwRTeatr6eGj5WMf\n",

"0rORI2WSSR+f2qOJ3/xbp7JSjI4GAAAAK6DMA6h38Tnp+iLmgCT2yjckR7ODXuh1sz4e86BauHnp\n",

"ZFaKxq9coOWn98pisRgdDwAAAPWIMg+g3s0/vEnllgrd2LqzIgPaGh2nyRnSqqPWTZ6tYa06qai8\n",

"VM9//7me2f6p8kqLjY4GAACAekKZB1CvEnLT9fmZqql8L6byRglw89Ky0ffrpT5j5GAy68uYAxq/\n",

"cr6OpZ83OhoAAADqAWUeQL2aV7VXfkTrMPUOCDY6TpNmNpn1VM8b9dm4R9TS3UexOWmatOotLY2O\n",

"Ytk9AACAnaPMA6g3Z3Mz9MWZ/ZI4g70t6R8YovWTZ2tU23AVl5fpf3Z+rce2fKTs4kKjowEAAOAa\n",

"UeYB1Jv5hzerzFKh4a3D1KcFU3lb0szVQ++NnKU/958gJ7ODVsUf0biV83UwNdHoaAAAALgGlHkA\n",

"9SIxN0Ofnd4nSXqOM9jbJJPJpIe7DdWX4x9TsKefzuZl6NbVC/WfY9tZdg8AAGBnKPMA6sX8w1sq\n",

"p/KtOqlPi3ZGx8Ev6BXQVmsmPa0JIT1UWlGuV3av0v0blyizKN/oaAAAAKglyjyA65aUl6lPT++V\n",

"xF55e+Hj4qaFI+7Rq4OmyMXBURsSozV6xTztTok3OhoAAABqgTIP4LrNP1S5V35oq47qG8hU3l6Y\n",

"TCbNDB+olROeUKi3vy4UZOuONe9oweHNqrBUGB0PAAAAv4AyD+C6JOVl6tMzlXvlmcrbp27NW2n1\n",

"pKd1a2ikyi0V+vu+dZqx/j2lFuYaHQ0AAAA/gzIP4LosOLxFpRXlGtKyo/oHhhgdB9fI08lF84ZN\n",

"07+G3C5XBydtO39aY1bM0/fnzxgdDQAAAFdBmQdwzc7lZWl59V55zmBv70wmk6Z16qvVk55SZ99A\n",

"XSzM1d3rFuuf+9errKLc6HgAAAC4DGUewDX795HKqfzglh00IKi90XFQT8J8A/XtLU/q7rB+ssii\n",

"uYc2adra/+pCfrbR0QAAAFCFMg/gmpzPy9LHp/ZIYirfGLk5Ouufg2/T/GF3ycPRWbtS4jRmxTxt\n",

"TIw2OhoAAABEmQdwjS5N5W8ICtXAoFCj48BKbu0QqTWTZqubX0tlFOdr1ob39b97VquUZfcAAACG\n",

"oswDqLPz+dk/TuV7cQb7xi7Ux18rJjyh+7oMkiQtPLpNt61epMTcDIOTAQAANF2UeQB19u/DW1RS\n",

"Ua6BQe01iKl8k+Dq6KT/HThZ79w4Q97OrtqfelZjV87TmoSjRkcDAABokijzAOrkQn62Pj61W5L0\n",

"HNeVb3LGh3TX2kmzFenfVtklRXp40zL9MWqlisvLjI4GAADQpFDmAdTJv49UTuUHBLbXDS07GB0H\n",

"Bgj28tOX4x/Vo92HSZLeO7FDU1a9rbicNIOTAQAANB2UeQC1llyQU71X/jnOYN+kOTs46o/9xmvJ\n",

"qPvUzMVdR9LPadzK+VoRe8joaAAAAE0CZR5Arb11eIuKy8s0IDCEqTwkSSPbhmvd5Gc0IDBEeaXF\n",

"enLrx/rdD1+qsKzE6GgAAACNGmUeQK0kF+Tow6q98r+JHCWTyWRwItiKVh4+Wj72YT0TcZNMMumj\n",

"U7s18Zt/61RWitHRAAAAGi3KPIBaefvIVhWXl6l/YIgGM5XHTziaHfTb3qP10ZgHFODmqZNZKZrw\n",

"zQJ9enqv0dEAAAAaJco8gF+VUpCjZSd3SZJ+EzmSqTx+1tBWnbRu0jMa0rKjCstK9dz3n+uZbcuV\n",

"X1psdDQAAIBGhTIP4Fddmsr3bdFOQ1p2NDoObFwLdy99OPoB/a73aJlNJn0Rc0Djv1mg4xnnjY4G\n",

"AADQaFDmAfyiiwW5+qBqKv8ce+VRSw5ms2ZH3KTPxj6iIHdvxWSn6pZv39IH0VGyWCxGxwMAALB7\n",

"lHkAv+jto5VT+T4BwRraiqk86mZAUHutn/yMRrYJV3F5mV7e+bUe3/KRckqKjI4GAABg1yjzAH5W\n",

"amGuPoiu2ivfi6k8ro2fq4feGzVTf+w3Xo4ms76NP6JxK+fpYGqi0dEAAADsFmUewM9aeGSbispL\n",

"1TsgWMNbdTI6DuyY2WTWo92H6csJj6mtZzMl5Gbo1tUL9d9j37PsHgAA4BpQ5gFcVWphrpZER0ni\n",

"DPaoP70DgrV20myNa9dNpRXl+svub/XgxqXKLC4wOhoAAIBdocwDuKqFR7erqLxUvQLaakTrMKPj\n",

"oBHxcXHTOzfO0P8bOFnOZgetTzyhMSvmak9KvNHRAAAA7AZlHsAV0grztOTETknSbziDPazAZDJp\n",

"VpdBWjnxCbX39tf5/GzdvuYdLTi8RRWWCqPjAQAA2DzKPIArLDxauVc+wr+NbmQqDyvq3ry11kx6\n",

"WlNCI1VuqdDf963VvevfU1phntHRAAAAbBplHkAN6UV5WhJdOZXnuvJoCJ5OLpo/bJpeH3ybXB2c\n",

"tPX8aY1eMVc/XIgxOhoAAIDNoswDqGHhke0qLKucyt/UprPRcdBEmEwm3RXWT6tueUphvi10sTBX\n",

"d639r/514DuVV7DsHgAA4Kco8wCqZRTlV0/lOYM9jNC5WaBW3fKU7urUVxZZ9MbBjbpr3X+VXJBj\n",

"dDQAAACbQpkHUG3R0e0qKCtRz+atNbJNuNFx0ES5OTrr9SG3a96wafJwdNbO5FiN/nquNiedNDoa\n",

"AACAzaDMA5BUOZV/78QOSUzlYRumduilNZOeVje/lsoozte9372nV/euUWlFudHRAAAADEeZByBJ\n",

"eudY5VS+R/PWGtW2i9FxAElSqE+AVkx4QrPCB0mS3jqyVbevXqSkvEyDkwEAABiLMg9AmUX5eu84\n",

"U3nYJldHJ/2/QZO16Mbp8nZ21b7UsxqzYp7WJRwzOhoAAIBhKPMA9M6x75VfVqLufq10M1N52KgJ\n",

"IT20dtJsRfq3VXZJoR7c9IH+vOsbFZeXGR0NAACgwVHmgSYuk73ysCPBXn76cvyjerTbUEnS4uM/\n",

"aMqqtxWXk2ZwMgAAgIZFmQeauP8c+155pcXq5tdSo4O7Gh0H+FXODo76Y/8Jen/ULPm6uOtI+jmN\n",

"WzlfK2MPGR0NAACgwVDmgSYss7hA71ZN5Z9lKg87M6ptF62f/Iz6B4Yor7RYT2z9WC/+8KUKy0qN\n",

"jgYAAGB1lHmgCftv1VS+q19LjWEqDzvUysNHn459WLN73iiTTPrw1G7d8u2/dTrrotHRAAAArIoy\n",

"DzRRWcUFevf4D5KkZyNGymzixwHsk6PZQb/rM0Yfjn5A/q6eis5M1vhv5uuz0/uMjgYAAGA1/PYO\n",

"NFH/Pf6DckuL1aVZkMa2YyoP+zesdSetn/yMBrfsoMKyUv3m+8/07LZPlV9abHQ0AACAekeZB5qg\n",

"rOICLT72vaTKvfJM5dFYtHD30kejH9Rve90ss8mkz2P2a/w3C3Q844LR0QAAAOoVv8EDTdDiqql8\n",

"Z99AjWvXzeg4QL1yMJv1TORIfTr2YQW6eysmO1W3fPtvLYveJYvFYnQ8AACAekGZB5qY7OJCLa7a\n",

"K/+bXqOYyqPRGhgUqvWTZ+vG1p1VXF6ml3Z+pSe2fKzckiKjowEAAFw3fosHmpjFx39QTkmROvsG\n",

"ajxTeTRyzV09teTmWfpD3/FyNJn1TfxhjV05X4fTkoyOBgAAcF0o80ATklNSpMXH2SuPpsVsMuux\n",

"HsP0xfjH1MbTVwm56Zq86m0tPv4Dy+4BAIDd4jd5oAl59/gPyi4pUphvC00I6W50HKBB9WkRrLWT\n",

"ZmtscDeVVpTrz7u+0UObPlBmcYHR0QAAAOqMMg80ETklRfrPse2SuK48mi5fF3f956YZ+tuASXI2\n",

"O2jd2eMau2Ke9l1MMDoaAABAnfDbPNBEvFdjKt/D6DiAYUwmk+7veoNWTHhCIV7NdS4/S1NXL9K/\n",

"D29RhaXC6HgAAAC1QpkHmoDckiK9U3Vd+WciRsrBzF99oId/a62Z9LQmt49QuaVCr+1bq3u/e19p\n",

"hXlGRwMAAPhV/EYPNAHvndih7JJCdfQJ0ESm8kA1L2dXLRh+l/5v8FS5ODhq67lTGrNirnZciDE6\n",

"GgAAwC+izAON3OVT+WcjmcoDP2UymXRPWH+tuuUpdfJpoZTCXN217r+ac2CDyitYdg8AAGwTv9UD\n",

"jdz7J3Yqq7hAHX0CdEtIT6PjADYrvFmQVt3ylKZ16qMKi0VzDm7Q3ev+q+SCHKOjAQAAXMFqZT49\n",

"PV2RkZHVH2FhYXJ0dFRGRoYuXryosWPHqlOnTurevbu2bdtmrRhAk5ZXWqxFVWewnx1xE1N54Fe4\n",

"OznrX0Pu0Nxh0+Tu6KwdybEas2Kutpw7ZXQ0AACAGhyt9cLNmzfXwYMHqz9//fXXtXXrVvn5+emB\n",

"Bx7QwIEDtXbtWu3Zs0e33nqr4uLi5OTkZK04QJN0aSof6u2vye0jjI4D2I3bOvRSpH8bPb7lIx3P\n",

"uKAZ69/Vkz1G6IXeN8vJ7GB0PAAAgIZbZr948WI9+OCDkqRPP/1Ujz32mCSpX79+atWqlbZu3dpQ\n",

"UYAmIb+0WIuOVq56eYa98kCddfAJ0MoJT2hW+EBJ0r+PbNEda97RubwsQ3MBAABIDVTmd+zYoczM\n",

"TE2cOFHp6ekqLS1VUFBQ9f0hISE6e/bsVZ9bXFysnJycGh/l5eUNERuwa++f2KnM6qk8e+WBa+Hq\n",

"6KT/N2iKFt44XV5OLtp7MUGjV8zV+rPHjY4GAACauAYp84sXL9bMmTPl6Fj3Vf2vvfaafHx8anzs\n",

"3r3bCimBxiO/tFgLq6bysyNukiPLgoHrMjGkh9ZOnq0I/zbKLinUAxuX6i+7vlFJeZnR0QAAQBNl\n",

"9TKfl5enTz/9VA888ICkyr30jo6OSk5Orn5MfHy8goODr/r8l19+WdnZ2TU++vfvb+3YgF1bEh2l\n",

"zOIChXg115RQ9soD9aGdV3N9Nf4xPdJtiCTpv8d/0K2rFyo+J93gZAAAoCmyeplfvny5IiIiFB4e\n",

"Xn3bHXfcoYULF0qS9uzZo3Pnzmn48OFXfb6Li4u8vb1rfDg4MGUEfk5BaYkWHqmcyj8byVQeqE/O\n",

"Do76U/+Jem/kTPm6uOtQWpLGrZynb+IOGx0NAAA0MVYv85ef+O6Sf/zjH9qxY4c6deqk++67T8uW\n",

"LeNM9kA9WRK9UxnF+VVT+Uij4wCN0s3BXbV+0mz1a9FOuaXFenzLR3p5x1cqLCs1OhoAAGgirHZp\n",

"ukt27NhxxW2BgYFav369tb800OQUlJZctlf+RqbygBW18vTVZ+Me0b8ObNCCw1v0wcld2nsxQW+P\n",

"uEcdfVsYHQ8AADRyXKsKaESWRkcpvShf7byaa2qHXkbHARo9R7ODXuwzRstG3y9/V0+dyEzW+G8W\n",

"6PMz+42OBgAAGjnKPNBIFJYxlQeMMrx1mNZNnq3BLTuooKxEz27/VM9t/0wFpSVGRwMAAI0UZR5o\n",

"JD6I3qW0ojy18/JjKg8YINDdWx+NflAv9LpZZpNJn57Zp/HfzNeJjORffzIAAEAdUeaBRqCwrERv\n",

"HdkqSXq6541yYioPGMLBbNazkSO1fOzDCnT31pnsVE38doE+PLlbFovF6HgAAKARocwDjcCyk5VT\n",

"+WBPP93WsbfRcYAmb1BQqNZPnq0bW3dWcXmZXtzxpZ7a+olyS4qMjgYAABoJyjxg5wrLSvV21XXl\n",

"n45gKg/Yiuaunlpy8yz9vu84OZrMWhF3SGNXztfhtCSjowEAgEaAMg/YuQ9P7tLFwly19Wym25nK\n",

"AzbFbDLr8R7D9cX4R9Xaw1cJuemavOptLT7+A8vuAQDAdaHMA3assKy0eq/8U+yVB2xWnxbttG7y\n",

"bI0J7qrSinL9edc3emjTB8osLjA6GgAAsFOUecCOXZrKt/H01R1M5QGb5uvirv/edK/+OuAWOZsd\n",

"tO7scY1dMU/7LiYYHQ0AANghyjxgp4rKSvX2ZVN5ZwdHgxMB+DUmk0kPdB2sryc8rnZezXUuP0tT\n",

"Vy/SW0e2qsJSYXQ8AABgRyjzgJ366NRupRTmqrWHr+7s2MfoOADqoKd/G62d9LQmt49QuaVCr+5d\n",

"o1nfLVF6UZ7R0QAAgJ2gzAN2qKisVP++7LryTOUB++Pl7KoFw+/S/w2eKhcHR20+d1KjV8zTzuRY\n",

"o6MBAAA7QJkH7NDHp/YopSBHrTx8dGcnpvKAvTKZTLonrL++nfiUOvoEKKUgR9PW/kdvHtyo8gqW\n",

"3QMAgJ9HmQfsTOVUfoskpvJAY9HFL0irb3lad3bsowqLRa8f+E73rF+slIIco6MBAAAbRZkH7Mwn\n",

"p/cquSBHLd19dGenvkbHAVBP3J2cNWfoHXpz6B1yd3TWDxdiNGbFPG07d9roaAAAwAZR5gE7Ulxe\n",

"pgWHN0uSnuo5Qi5M5YFG5/aOfbT6lqfUpVmQ0oryNH39u/rHvnUqqyg3OhoAALAhlHnAjnxyao+S\n",

"C3IU5O6tu8L6GR0HgJV09G2hlROf1L2dB8gii+Yf3qw71ryj83lZRkcDAAA2gjIP2InKqfwWSZXX\n",

"lWcqDzRubo5Oeu2GW/X2iHvk5eSiPRcTNHrlPH139rjR0QAAgA2gzAN24tPTe3WhILtyKs9eeaDJ\n",

"uKV9T62ZNFs9m7dWVnGB7t+4VK/s/lYl5WVGRwMAAAaizAN2oLi8TPOr9so/2WOEXB2dDE4EoCGF\n",

"eDfXVxMe10NdB0uS/nPse926eqESctMNTgYAAIxCmQfswGen9+l8frYC3b11N3vlgSbJxcFRfxlw\n",

"i94dOVM+zm46lJaksSvm6dv4I0ZHAwAABqDMAzaupMZUfjhTeaCJGx3cVesnP6O+Ldopt7RYj23+\n",

"UP+z82sVlZUaHQ0AADQgyjxg4z49s0/n8rMU6Oale8L6Gx0HgA1o7emrz8Y9oid7jJAkLY2O0qRV\n",

"bykmO9XYYAAAoMFQ5gEbVnLZdeUfZyoP4DJOZge93Heslo1+QM1dPXQ844LGrZyvL2IOGB0NAAA0\n",

"AMo8YMM+O7NfSXlZauHmpemdBxgdB4ANGtE6TOsmP6MbgkJVUFaiZ7Yt1/Pff6aC0hKjowEAACui\n",

"zAM2qrSivHoq/0SP4XJjKg/gZwS5e+vjMQ/p+V6jZDaZtPz0Pk34ZoGiM5ONjgYAAKyEMg/YqM/P\n",

"7FdiXiZTeQC14mA26zeRo/TJmIcU6Oal09kXNeGbBfro1G5ZLBaj4wEAgHpGmQdsUGlFueYd2iRJ\n",

"erzHMKbyAGrthpYdtG7yMxrROkzF5WX63Q9f6qltnyi3pMjoaAAAoB5R5gEb9EXVVD7AzVMzmMoD\n",

"qCN/N08tvfk+/U/fcXIwmbUi9pDGrZyvI2nnjI4GAADqCWUesDGlFeXV15V/vPtwuTk6G5wIgD0y\n",

"m8x6osdwfTHuUbX28FV8bromr3pL7x3fwbJ7AAAaAco8YGO+jDmghNwM+bt66t5wpvIArk/fwHZa\n",

"O3m2xgR3VUlFuf64a6Ue3rRMWcUFRkcDAADXgTIP2JCyinLNO1Q5lX+s+zCm8gDqRTMXd/33pnv1\n",

"yoBb5GR20NqzxzR25Tztu3jW6GgAAOAaUeYBG1I5lU9Xc1cPzQwfaHQcAI2IyWTSg10H6+sJj6ud\n",

"l5+S8rJ02+qFWnhkmyosFUbHAwAAdUSZB2xEWUW55l42lXd3YioPoP5F+LfRmkmzdUtIT5VZKvS/\n",

"e1frvg1LlFGUb3Q0AABQB5R5wEZ8HXtQCbnp8nPx0KzwQUbHAdCIeTu76q0Rd+vvN9wqFwdHbUo6\n",

"qZtXzFVUcqzR0QAAQC1R5gEbUFZRrjcPVl5X/rEeTOUBWJ/JZNKMzgP0zcQn1dEnQCkFObpz7X80\n",

"9+BGlVew7B4AAFtHmQdswNexhxRfPZVnrzyAhtPVr6VW3fKU7ujYWxUWi/554DtNX/+uLhbkGh0N\n",

"AAD8Aso8YLDKM9hXTuUf7T5UHk4uBicC0NR4OLnojaF36o0hd8jN0UnfXzij0Svmavv500ZHAwAA\n",

"P4MyDxhsRdxhxeakqZmLu+7rwl55AMa5o1MfrbnlaYU3C1JaUZ7uWfeu/m/fOpVVlBsdDQAA/ARl\n",

"HjBQeUWF5h7cKImpPADb0NG3hb6Z+KRmdB4giyyad3iz7lz7Hx1MTTQ6GgAAuAxlHjDQirhDis1J\n",

"k6+Lu+7rcoPRcQBAkuTm6KS/33Cr3hp+tzydXLQ7JV4Tv/23JnyzQMtP71VhWanREQEAaPIo84BB\n",

"yisqNPfSXvluQ+XJVB6AjZkUGqG1k2ZraodecjY76FBakp7//nP1Xf6q/rr7W8XlpBkdEQCAJosy\n",

"Dxjkm/jDislOrZrKs1cegG0K8W6uecOmac+0l/Vyn7Fq69lM2SWFeufY9xr6xeuavv5drT97nMvZ\n",

"AQDQwByNDgA0ReUVFXqzaq/8I92GyMvZ1eBEAPDLmrt66smeI/RY92Hacu6UlkTv1OakU9p6rvKj\n",

"tYevZnQeoLvC+irAzcvouAAANHqUecAA38Yf0ZnsVPk4u+l+9soDsCMOZrNGtg3XyLbhSshN17Lo\n",

"3frk9B6dy8/SP/av05yDGzQ+pLtmhQ9SvxbtZDKZjI4MAECjRJkHGljlXnmm8gDsXzuv5vp9v3F6\n",

"vtcofRt/WEuio3QgNVErYg9pRewhdWkWpFnhg3Rrh0iu1gEAQD2jzAMNbFX8EZ3KuigfZ1fd33Ww\n",

"0XEA4Lq5Ojrp9o59dHvHPjqclqSl0VH6OvaQTmQm66WdX+l/967W7R17a2b4QIX5BhodFwCARoET\n",

"4AENqMJSoTerpvIPdRsib6byABqZnv5t9PqQ27V32sv6S/+Jau/tr7zSYr1/Yqdu+uoN3bHmHX0b\n",

"d1ilFeVGRwUAwK4xmQca0Kr4o9VT+Qe6MJUH0Hj5urjroW5D9EDXG/TDhRgtORGl9YnHtTM5VjuT\n",

"YxXo5qW7O/fX9LD+aunhY3RcAADsDmUeaCAVlh/PYP9g1yHycXEzOBEAWJ/ZZNbQVp00tFUnnc/L\n",

"0oenduujU7uVUpirNw9u1PxDmzUmuKtmhQ/UDS07cMI8AABqiTIPNJDVCcd0MitF3s6uepC98gCa\n",

"oFaevvpt79F6JuImrU04piXRUdqVEqfVCUe1OuGoOvoE6N7wgbq9Q2/+wRMAgF9BmQcaQIWlQm8c\n",

"2CBJerDrYH5JBdCkOTs4alJohCaFRig6M1kfREfp8zP7dSY7VX/e9Y3+vm+tbg3tpVnhA9WteSuj\n",

"4wIAYJM4AR7QANZUTeW9nFyYygPAZcKbBen/DZqifXf9Xq8OmqLOvoEqLCvVR6d2a8zKeZr87Vv6\n",

"MuaAisvLjI4KAIBNYTIPWFmFpUJvXNor322IfF3cDU4EALbH08lFM8MH6t7OA7QrJU5Lo6O0Ov6o\n",

"9qWe1b7Us/rLrm91d1g/zejcX229/IyOCwCA4SjzgJWtTTiu6MxkeTm56CGm8gDwi0wmkwYGhWpg\n",

"UKguFuTq41O7tezkbl0oyNa/j2zRW0e2amTbzpoZPkgjWneS2cQiQwBA00SZB6zo8uvKP9B1MFN5\n",

"AKiDFu5eeiZypJ7sOUIbEqO1NDpK286f1obEaG1IjFY7Lz/N6DxAd3Xqq2auHkbHBQCgQVHmASta\n",

"d/a4jmdckKeTix7qNsToOABglxzNDhrbrpvGtuum2OxUfXBylz49vVcJuRn6f3vX6PUD32lS+56a\n",

"GT5Ikf5tuLwdAKBJoMwDVmKxWKqvK/9AlxvUjKk8AFy3UJ8A/bn/RP2u92h9HXtIS07s1NGM8/rs\n",

"zH59dma/ejZvrZnhAzU5NEJujs5GxwUAwGrYaAZYyfqzx3Wsair/MFN5AKhXbo7Oujusn9ZMelor\n",

"Jz6h2zv0louDow6nn9MLP3yhvstf1Su7v1VsdqrRUQEAsAom84AVWCyW6jPY39/lBvZyAoCVmEwm\n",

"9Q4IVu+AYP2p/wQtP71XH0Tv0tm8DP3n2Pf6z7HvNaxVJ80KH6iRbcPlaHYwOjIAAPXimst8SUmJ\n",

"nJ1ZvgZczXeJJ3Q047w8HJ31CFN5AGgQfq4eerzHcD3afai2nDutJSd2alPSSW07f1rbzp9WKw8f\n",

"zeg8QHeH9VOAm5fRcQEAuC51Wma/ZcsW3XXXXQoICJCrq6ucnZ3Vu3dvvfrqq8rIyLBWRsCuWCwW\n",

"zTmwQZJ0f1em8gDQ0Mwms25q01lLbr5PP9z+Wz3RY7j8XDx0Pj9b/7d/vfp/+nc9ueVj7UqOk8Vi\n",

"MTouAADXpNZlfvz48Zo3b56mTp2q/fv3q7i4WOnp6Vq4cKHKysp00003ae3atdbMCtiFDVVTeXdH\n",

"Zz3SbajRcQCgSQv28tP/9B2n3Xe+pLnDpqlPQLBKK8q1Iu6QbluzSKO+flNLo6OUV1psdFQAAOrE\n",

"ZKnlP0kfOXJEPXr0+Nn7S0tLFRcXp7CwsHoL93Oee+45zZkzx+pfB6gri8WiCd8s0OH0c3qix3D9\n",

"T99xRkcCAPzE0fRzWhq9S1/FHlBhWakkydPJRbd16K2Z4QPVuVmgwQkBAPh1tS7zV2OxWJSXlycv\n",

"r4bdd0aZh63akHhC921YIndHZ+2843dq7uppdCQAwM/ILi7UZ2f2aWl0lGJz0qpvHxjUXrPCB2lM\n",

"cFc5O3CuYACAbarzpekefPBBZWVlqaSkRJGRkQoMDNRbb71ljWyAXbn8DPazwgdR5AHAxvm4uOmh\n",

"bkO0derz+mTMQxrXrpscTGZFJcfp8S0faeBn/9A/96/X+fxso6MCAHCFOpf5ffv2ydfXV2vXrlWv\n",

"Xr2UnJyshQsXWiMbYFc2JZ3UobQkuTk66bEe7JUHAHthMpk0pFVH/eeme7Xzjhf1bORItXDz0sXC\n",

"XM09tEmDPvuHHtr4gbafP80J8wAANqPOa8cuvYlt375dEydOlLe3txwcuGYrmjaLxaI5ByvPYM9U\n",

"HgDsVysPH73Q62Y9E3GT1iUc0/vROxWVHKe1Z49p7dljCvX218zwgbqjYx/5uLgZHRcA0ITVeTIf\n",

"FBSkxx9/XJ999plGjRql0tJSlZeXX/WxxcXFeuqpp9SpUyf16NFDM2bMkCStXbtWffv2Vc+ePTVw\n",

"4EAdOnTo+r4LwGCbz536cSrffZjRcQAA18nJ7KCJ7Xvq83GPauOU32hW+CB5OrkoNidNf9n9rfos\n",

"f1W//eELHU0/Z3RUAEATVefJ/Icffqhly5Zp1qxZ8vX1VXx8vJ577rmrPvall16SyWTSqVOnZDKZ\n",

"lJycrMzMTE2fPl3btm1Tt27dtH37dk2fPl1Hjx697m8GMMLl15WfGT5I/m5M5QGgMencLFD/b9Bk\n",

"vdx3rL6KOaAl0VGKzkzWx6f26ONTe9Q7IFgzwwdqYkgPuTo6GR0XANBEXNPZ7C9cuKCTJ09qxIgR\n",

"Ki0tlcVikbOzc43H5Ofnq2XLlkpKSpK3t3f17Xv37tU999yjU6dOVd/m7e2tLVu2qHfv3ld8reLi\n",

"YhUX17z26x//+EfNnTu3rrEBq9icdFL3fveeXB2ctPOO3ynArWGv7gAAaFgWi0V7LiZoSfROrY4/\n",

"qtKKyhWKfi4euiusr2Z0HqBgLz+DUwIAGrs6L7P//PPPNXDgQN13332SpOPHj2vKlClXPC4mJkZ+\n",

"fn569dVX1bdvXw0dOlQbN25Up06dlJ6erh07dkiSVq5cqdzcXMXHx1/167322mvy8fGp8bF79+66\n",

"xgas4vIz2M8MH0CRB4AmwGQyqX9giP49/G7tuuMl/a73aLXy8FFGcb7eOrJVgz//p2Z99742Jkar\n",

"vKLC6LgAgEaqzmX+tdde0/79+9WsWTNJUkREhBISEq54XFlZmRISEtS1a1ft3btX8+bN07Rp01RU\n",

"VKTPP/9cL7/8svr06aP169era9eucnS8+or/l19+WdnZ2TU++vfvX9fYgFVsPX9a+1PPytXBSY91\n",

"H250HABAA2vh7qXZETdpx+2/0+Kb7tXwVp1kkUUbk6I1a8P7GvrF63rryFZlFOUbHRUA0MjUec+8\n",

"g4ODmjdvXuO2ny6xl6Tg4GCZzWZNnz5dktSrVy+1b99eR44c0ahRo3TjjTdKqlxGHxQUpK5du171\n",

"67m4uMjFxeWKDIDRLBaL3qjaK39v+AC1cGcqDwBNlaPZQWPaddOYdt0Um52mZSejtPz0Xp3Ny9Cr\n",

"e9foXwe+08SQHpoZPki9A9rKZDIZHRkAYOfqPJn38vJSSkpK9ZvQxo0b5ed35b4wf39/jRw5UuvW\n",

"rZMkxcXFKS4uTl26dNGFCxeqH/e3v/1NN910kzp27Hit3wNgiO3nz2hf6lm5ODjqcabyAIAqoT7+\n",

"+lP/ido77X/0ryG3q2fz1iouL9MXMQc0edVbGrdyvj4+tUeFZSVGRwUA2LE6nwBv7969euSRRxQb\n",

"G6vu3bsrLi5Oq1atUmRk5BWPjY2N1YMPPqi0tDSZzWb96U9/0m233aaHH35Y27dvV1lZmQYNGqT5\n",

"8+fL19e31hmee+45zZkzpy6xgXplsVh06+qF2nsxQQ91Hay/DLjF6EgAABt2IDVRS6N3amXcYRWX\n",

"l0mSfJxddUfHPpoZPlChPgEGJwQA2JtrOpt9dna2duzYIYvFohtuuKFORbw+UOZhtO3nT+vudYvl\n",

"4uCoHbf/ToHu3r/+JABAk5dZlK/lp/fpg5NRSsjNqL59aKuOmhk+UDe37SJHM9sJAQC/rs575iXJ\n",

"x8dH48aNq+8sgF24/LryMzoPoMgDAGqtmauHHusxTI90H6Kt505raXSUNiRGa/v5M9p+/oxauvto\n",

"Ruf+ujusP+diAQD8ojrvmV+7dq3Cw8Pl7OwsBwcHmc1mTkiHJuWHCzHaczGhcq98D/bKAwDqzmwy\n",

"68Y2nfXeqFnacftv9WSPEfJz8dCFgmz988B36v/pa3piy0eKSo7VNSyiBAA0AXWezM+ePVvz58/X\n",

"oEGDKPFociqvK185lb8nrL+CmMoDAK5TWy8/vdx3rJ7rNUqr4o9oaXSU9l5M0Mq4w1oZd1idfQM1\n",

"M3ygpnboJS9nV6PjAgBsRJ3LvLe3t8aMGWONLIDN23EhRrtS4uXi4KgnmMoDAOqRi4Ojpnbopakd\n",

"eulY+nktjY7Sl7EHdDIrRb+PWqFX967RbR17a2b4QIU3CzI6LgDAYHVeZj9x4kR9/fXXVogC2L45\n",

"BzdKku4O66eWHj4GpwEANFbdmrfSPwZP1b5pv9dfB9yijj4Byi8r0dLoKI36+k3dtnqhVsYeUknV\n",

"mfEBAE1PrSfzzZo1k8lkksViUXZ2ttzc3OTi4iKLxSKTyaSMjIxffxHAjlVO5ePkbHbQkz1GGB0H\n",

"ANAEeDu76oGug3V/lxu040KMlkRHad3Z49qVEq9dKfEKcPPUPWH9NT2sv1p5+hodFwDQgGpd5g8e\n",

"PGjFGIDtm1O1V/7usP5M5QEADcpkMmlwq44a3KqjLuRn66NTu/XRyd1KKczV3EObNP/wZt3ctotm\n",

"hQ/SkFYdZDbVefElAMDO1LrMt2vXTpJ09uxZtWjRQq6ulSdgKSoqUmpqqnXSATZix4UYRSVXTeV7\n",

"jjA6DgCgCWvp4aPne92s2RE3ad3Z41p6Yqd2JMdq3dnjWnf2uNp7+2tm+ADd0bGPfF3cjY4LALCS\n",

"Ov+z7e23317jc4vFcsVtQGPzxmV75VsxlQcA2AAns4MmhvTQp+Me0aZbf6P7u9wgLycXxeWk6ZXd\n",

"q9R3+Wt64fvPdSTtnNFRAQBWUOez2ZeUlFRP5SXJzc1NxcXF9RoKsCVRybHamRwrJ/bKAwBsVJhv\n",

"oP42cJJe6jNGX8Uc1JLonTqRmaxPTu/VJ6f3qldAW80KH6iJIT3l6uhkdFwAQD2oc5k3mUy6ePGi\n",

"WrRoIUlKTk6WxWKp92CArbg0lb+rU19OLgQAsGkeTi6aET5A0zv3196LCVoSHaVV8Ud0IDVRB1IT\n",

"9cruVZrWqa/uDR+gdl7NjY4LALgOdS7zs2fP1qBBg3TvvfdKkpYtW6Y///nP9R4MsAW7kuP0w4UY\n",

"OZkd9FTPG42OAwBArZhMJvULDFG/wBD9uf8ELT+9Vx9E79K5/CwtPLpNi45u14jWYbqvyyCNaB0m\n",

"BzMnzAMAe1PnMn///ferffv2Wr16tSTpvffe09ChQ+s9GGALLk3lp3Xqq9ZM5QEAdijAzUtP9bxR\n",

"j3cfrk1J0VoSHaUt505p87mT2nzupNp6NtOMzgN0V1hfNXf1NDouAKCWTBY7XCP/3HPPac6cOUbH\n",

"QCO3OyVeU1cvlJPZQdtve0FtPJsZHQkAgHoRl5OmZdG79MnpvcouKZQkOZsdNLF9T80KH6jeAcEy\n",

"mUwGpwQA/JI6T+bj4+P1j3/8QzExMSorK6u+fdOmTfUaDDDaG1XXlb+zYx+KPACgUWnv7a8/9p+g\n",

"F3qP1jdxh7QkOkqH0pL0ZcwBfRlzQN38Wmpm+CDdGhopdydno+MCAK6izpP5/v37a+TIkRo0aJAc\n",

"HByqb58wYUK9h/s5TOZhbXtS4nXr6oVyNJm1/bYX1NbLz+hIAABY1cHURC2NjtKKuEMqLq8c2Hg7\n",

"u+qOjn00M3ygOvgEGJwQAHC5Ok/mi4qK9Nprr1kjC2AzLu2Vv7NTX4o8AKBJiAxoq8iAtvpjv/H6\n",

"9Mw+LY3epYTcdC0+/oMWH/9BQ1p21MzwgRod3EWOZodff0EAgFXVucx3795dZ8+eVXBwsDXyAIbb\n",

"dzFB286flqPJrKd7jjA6DgAADaqZq4ce7T5MD3cbom3nz2jpiZ3akBSt7y+c0fcXzijI3VvTO/fX\n",

"PWH9FejubXRcAGiy6lzmU1NTFRERoUGDBsnV1bX69i+//LJegwFGmVM1lb+9Y2+m8gCAJstsMmtE\n",

"6zCNaB2mpLxMfXhytz46tVvJBTn614ENmntwk8a266ZZXQZpYGB7TpgHAA2szmV+xowZmjFjhjWy\n",

"AIbbd/Gstp47VTmVj+C68gAASFIbz2Z6sc8YPRs5UmsSjmppdJR2p8Tr2/gj+jb+iMJ8W2hm+CDd\n",

"1qGXvJxdf/0FAQDXjUvTAZeZsf5dbTl3StM69dW/htxudBwAAGzW8YzzWhq9S1/GHFBBWYkkyd3R\n",

"Wbd16KWZ4YPUxS/I4IQA0LjVusw/99xzv3h/Q5ZryjysYX/qWU369i05mMzadtvzaufV3OhIAADY\n",

"vJySIn1xZr+WRkfpdPbF6tv7B4ZoZvhAjW/XXc4OdV4MCgD4FbX+yerj42PNHIDh3jhwaa98L4o8\n",

"AAC15O3sqvu73qD7ugzSzuRYLY2O0tqEY9qdEq/dKfHyd/XU3WH9NKPzALX29DU6LgA0GiyzByQd\n",

"SE3ULd/+Ww4ms7ZOfV4h3pR5AACuVXJBjj46uVsfntqtlIIcSZLZZNLNbbtoZvhADW3VUWaT2eCU\n",

"AGDfav1TdNeuXb94f2FhoY4fP37dgQAjvHFwgyTptg69KPIAAFynIHdvPddrlKLueFGLbpyuwS07\n",

"qMJi0bqzxzV9/bsa9sW/9M7R7cosLjA6KgDYrVovs//Xv/6lzMxM3XPPPRowYIACAwNVVFSkkydP\n",

"au3atVq/fr3eeOMNde3a1Zp5gXp3MDVRm5JOyoEz2AMAUK+czA6aENJDE0J66HTWRX0QHaXPzuxT\n",

"fG66/rpnlf6xf52mhEZoVvgg9fRvY3RcALArdVpmv2fPHi1atEhbtmxRUlKSPDw81LNnT9122226\n",

"//775eHhYc2s1Vhmj/p034b3tSExWrd36K03h91pdBwAABq1/NJifR17SEuid+p4xoXq2yP922pW\n",

"+EBNbN9Tbo5OBiYEAPvAnnk0aYfSkjThmwUym0zacuvzCvXxNzoSAABNgsVi0b6LZ7UkeqdWxR9R\n",

"SUW5JMnXxV3TOvXVvZ0HsPUNAH5Bnc888sQTT9TqNsAevHmw8gz2t4ZGUuQBAGhAJpNJfQPbaf7w\n",

"u7T7zpf1Up+xauPpq6ziAi06uk1DvvinZqx/V9+dPa7yigqj4wKAzanzRT+joqKuuG3Hjh31EgZo\n",

"SIfTkvRd4gmZTSY9E3GT0XEAAGiy/N089VTPEXq8+zBtPndSS05Eacu5U9UfbTx9NaPzAN3VqZ/8\n",

"3TyNjgsANqHWZX758uX65JNPFBcXp6lTp1bfnp2dLU9PfqjC/lyayk8JjVSoT4DBaQAAgIPZrFFt\n",

"u2hU2y6Kz0nXByd3afnpvUrKy9Lf963TnAMbNCGkh2aFD1KfFsEymUxGRwYAw9S6zIeHh2vy5Mna\n",

"v3+/Jk+eXH27t7e3Ro4caZVwgLUcTT+n9UzlAQCwWSHezfXHfuP1Qq+b9W3cYS2JjtLBtER9FXtQ\n",

"X8UeVFe/lpoZPlC3hkbKw8nF6LgA0ODqfAK81NRUBQQYO8XkBHi4Xg9uXKp1Z4/r1tBIzR9+l9Fx\n",

"AABALRxKS9LS6Ch9HXtQxeVlkiQvJxfd3rGPZoYPVCffFgYnBICGU+cyn5WVpUWLFikmJkZlZWXV\n",

"t7/77rv1Hu7nUOZxPY6ln9eYlfNkkkmbb/2NOvLGDwCAXcksLtDnZ/ZpyYkoxeemV98+uGUHzQwf\n",

"qNHBXeVkdjAwIQBYX51PgHf77bcrICBAgwYNkoMDPyRhf96o2is/KbQnRR4AADvUzMVdD3cbqge7\n",

"Dtb282e0NDpK3yWe0A8XYvTDhRgFuntrelh/3dO5v4LcvY2OCwBWUecyf+HCBW3YsMEaWQCrO55x\n",

"XmvPHpNJJj0bwbkeAACwZ2aTWcNbh2l46zCdy8vShyd36aNTe5RSkKM5Bzdo7qFNGtuum2aGD9QN\n",

"QaGcMA9Ao1LnMt+hQwdlZWXJ19fXCnEA66qeyrfvyb46AAAakdaevvpdnzF6NnKk1iQc09LondqV\n",

"Eq9V8Ue0Kv6IOvm00L3hA3R7xz7ydnY1Oi4AXLdal/nnnntOkuTu7q7evXtr7NixcnX98Qche9hh\n",

"645nXNCahMqp/DORnMEeAIDGyNnBUZNDIzQ5NEInMpL1wckofXFmv05nX9Sfdn2jv+9bp6kdemlm\n",

"+AB19WtldFwAuGa1LvM+Pj7V/+3SpYvVAgHWcum68re076Ew30CD0wAAAGvr4hekVwdN0ct9xuqL\n",

"mANaGr1Tp7IuatnJXVp2cpf6tWinmeGDND6ku1wc6rxgFQAMVeez2dsCzmaPujqRkaybV7wpk0za\n",

"MOVZdW5GmQcAoKmxWCyKSonT0hNRWpNwVGWWCklSc1cP3R3WTzM6D1Abz2YGpwSA2qnzP0H+9a9/\n",

"veI2X19fDRo0SP369auXUEB9e/NQ5VR+YkgPijwAAE2UyWTSoKBQDQoKVUpBjj4+tUfLTu5SckGO\n",

"FhzeoreObNWoNuGa2WWQhrXqKLPJbHRkAPhZdf4JdeLECb399ttKTExUUlKSFi5cqC1btmj69Oma\n",

"N2+eNTIC1yU6M1mr4o9IEnvlAQCAJCnQ3VvPRo5U1B0v6p0bZ2hIy46qsFi0PvGEZqx/V0O/+JcW\n",

"Hd2mzOICo6MCwFXVeTKfmZmpgwcPKjCwcrqZkpKie++9V1FRURo6dKhmz55d7yGB6zH34CZJ0oSQ\n",

"HgpvFmRwGgAAYEsczQ4aH9Jd40O660zWRX1wcpc+O7NPCbnp+tue1fq//es1uX2EZoYPVGRAW6Pj\n",

"AkC1Opf5pKSk6iIvSYGBgTp//rz8/Pzk5ORUr+GA63UyM0XfVk3lua48AAD4JR19W+iVAbfoxd5j\n",

"9HXcQS05sVPHMi7o0zP79OmZfYrwb6OZ4QM1qX2E3Bz5vReAseq8zL5169Z65ZVXlJiYqMTERP31\n",

"r39Vq1atVF5eLpPJZI2MwDWbe2ijLLJofLvu6uLHVB4AAPw6dydn3RPWX2snzdaKCU/otg695Gx2\n",

"0KG0JD3//efqu/xV/W33KsXlpBkdFUATVucyv2TJEh07dkyRkZGKjIzU0aNH9f7776u0tFRLly61\n",

"RkbgmpzKStE3cVVT+Uim8gAAoG5MJpP6tAjW3GHTtGfay/qfvuPU1rOZsksKtejYdg394nVNX/+u\n",

"1p89rvKKCqPjAmhiuDQdGq0nt3ysFXGHNK5dN/3npnuNjgMAABqB8ooKbTl3Skuid2pz0ilZVPmr\n",

"dGsPX83oPEB3hfVVgJuXwSkBNAW13jO/detWDR8+XCtXrrzq/ZMmTaq3UMD1Op11USvjDkuSfsNU\n",

"HgAA1BMHs1kj24ZrZNtwJeSma1n0bn1yeo/O5WfpH/vXac7BDZoQ0kOzwgeqb4t2bEMFYDW1LvPL\n",

"li3T8OHD9cYbb1xxn8lkoszDprxZtVd+bHA3dfVrZXQcAADQCLXzaq7f9xun53uN0rfxR7QkeqcO\n",

"pCbq69iD+jr2oLo0C9Ks8EG6tUOkPJxcjI4LoJFhmT0anTNZF3XjV2/IIovWTZqtbs0p8wAAoGEc\n",

"TkvS0ugofR17SEXlpZIkTycX3d6xt2aGD1SYb+CvvAIA1E6dT4BXVlamf/3rX3riiSckSTExMdq0\n",

"aVO9BwOu1dxDm2SRRWOCu1LkAQBAg+rp30avD7lde6e9rL/0n6j23v7KKy3W+yd26qav3tAda97R\n",

"t3GHVVpRbnRUAHauzteZf+qpp1ReXq7vv/9ektS8eXNNmzZNe/furfdwQF3FZKdqRdwhSeyVBwAA\n",

"xvF1cddD3Yboga436IcLMVpyIkrrE49rZ3KsdibHKtDNS/d07q97wvqrpYeP0XEB2KE6l/moqCgd\n",

"PHhQvXr1kiT5+vqqtLS03oMB12LuoU2qsFg0um0XdW/e2ug4AACgiTObzBraqpOGtuqk83lZ+vDU\n",

"bn10ardSCnP1xsGNmndos8YEd9Xo4C4K9QlQB+8A+bi4GR0bgB2oc5l3dXWt8Xl5ebkquK4mbEBs\n",

"dqq+jj0oSfpN5ChjwwAAAPxEK09f/bb3aD0TcZPWJhzTkugo7UqJ0+qEo1qdcLT6cc1dPdTBJ0Dt\n",

"vf3VwSdAoVX/Dfbyk4tDnX99B9BI1fmnQc+ePbVs2TJVVFTozJkz+vvf/64RI0ZYIRpQN5em8je3\n",

"7aIe/kzlAQCAbXJ2cNSk0AhNCo1QdGaylp/eq2Pp5xWbk6bkghylF+UrvShfu1PiazzPbDKprWcz\n",

"hXoHqIOPf9Uk31/tfQLU0t2by+ABTUydy/ycOXP0/PPPKzk5WYMHD9aUKVP0j3/8wxrZgFqLzU7T\n",

"V9VTefbKAwAA+xDeLEh/7j+x+vP80mLF5aQpJjtNsTmpislOq/o8VXmlxUrIzVBCboY2nztZ43Xc\n",

"HJ0U6u2vUO8AhV5W9EN9AuTt7PrTLwugEah1mV+5cmX1nydMmKDx48dLqrzG/IYNG7jOPAw1r2oq\n",

"P6ptuHr6tzE6DgAAwDXxcHJR9+atrzj3j8ViUWphnmJyUhWbnabY7FTFVpX8s7kZKiwr1bGMCzqW\n",

"ceGK1wxw86ws+pct2Q/19lewl5+cWbYP2K1a/+194403qv+8b98+9e3bV5cuUW8ymSjzMExczuVT\n",

"efbKAwCAxsdkMqmFu5dauHtpUFBojftKK8qVmJtRXe5js9MUk5OquOw0pRTmKrUwT6mFedr1k2X7\n",

"Diaz2no2qyz3Pv7q4B2g9j6VZT/QzYtl+4CNq3WZ37x5c/Wfe/XqxbXlYTPmH9qsckuFbmrTWRFM\n",

"5QEAQBPjZHaonLr7BGhU2y417sstKaqxbD82O02xOZWT/fyyEsXnpis+N10bk2q+poejc/UkP9TH\n",

"v8Y+fU8nlwb87gD8nGtaV8O/0sFWxOek64uYA5KYygMAAPyUl7Orevq3uWIbosViUUphrmKyKyf4\n",

"l/bnx+ak6WxuhvLLSnQk/ZyOpJ+74jUD3bwqJ/hV+/MvLdtv6+UnJ7NDQ31rQJPHJhnYtfmHN6nc\n",

"UqEbW3dWr4C2RscBAACwCyaTSUHu3gpy99bglh1q3FdSXqbEvMwaS/Zjqwp/amGeUgpzlVKYq6jk\n",

"uBrPczSZFezlV13uQy9bvh/g5slAEKhntS7zhw8frv5zYWGhjhw5Ur1nXqq8ZB3QkOJz0vX5maqp\n",

"fC/OYA8AAFAfnB0c1cEnQB18Aq64L6ekqMbJ9y6daT82J02FZaWVS/hz0q54nqeTy1VPwhfq4y8P\n",

"lu0D16TWZX7y5Mk1Pr/8hHcmk0mxsbH1lwqohfmHK/fKj2gdpt4BwUbHAQAAaPS8nV0VGdBWkT9Z\n",

"EWmxWHShIEdx2amKqdqTf2nZfmJehvJKi3U4/ZwOX23Zvrt39WX0Ovj8eHm9tp7N5MiyfeBn1brM\n",

"x8XF/fqDgAaSkJuuL87sl8ReeQAAAKOZTCa18vBRKw8fDW7VscZ9xeVlOpubUT3Bv3yin16Ur5SC\n",

"HKUU5GhHcs3hoJPZQe28/K5Ysh/q4y9/V5btA+yZh12af2izyiwVGt46TH1aMJUHAACwVS4Ojurk\n",

"20KdfFtccV9WcUHV2fXTfrJ8P11F5aU6k52qM9mpUuKJGs/zdnZV+8uW61/6b3tvf7k7OTfUtwYY\n",

"ijIPu3M2N0OfV03ln4tkrzwAAIC98nVxV++A4Cu2TFZYKnQhP+fHs+xXLd+Py05TYl6mckqKdCgt\n",

"SYfSkq54zZbuPpXl3se/eqrfwcdfbTyaycFsbqhvDbA6yjzszvzDlVP5Ya06qU+LdkbHAQAAQD0z\n",

"m8xq7emr1p6+GtqqU437ispKlXDZsv246sKfpozifF0oyNaFgmx9f+FMjec5mx0U4t38yom+j7/8\n",

"XDxYtg+7Y9UyX1xcrOeff17r1q2Tq6urIiIitGzZMq1evVp/+MMfVFFRobKyMv32t7/VrFmzrBkF\n",

"jURiboY+O71PkvQbpvIAAABNjqujkzo3C1TnZoFX3JdZXHDFkv3Kwp+m4vIyncq6qFNZF694no+z\n",

"W409+aHVy/aby82RZfuwTVYt8y+99JJMJpNOnTolk8mk5ORkWSwWzZgxQ1u2bFHPnj0VHx+v8PBw\n",

"TZ06VV5eXtaMg0ZgweEtKrNUaGirjuoXGGJ0HAAAANiQZi7u6tMi+IpzKlVYKnQ+P7uy3GenKSYn\n",

"VXFV/z2Xl63skkIdSE3UgdTEK16ztYdv1ZL9qpPwVRX91h6+LNuHoaxW5vPz87V48WIlJSVVL1kJ\n",

"CgqSxWKRyWRSVlaWJCknJ0fNmzeXi8vVry9ZXFys4uLiGreVl5dbKzZsWFJeppaf3iuJM9gDAACg\n",

"9swms9p4NlMbz2Ya3jqsxn2FZaWKz0lXbE5l0b+0Tz8mO1XZJYU6l5+lc/lZ2n6+5rJ9FwdHhXg1\n",

"ry76HS77bzNXj4b89tBEWa3Mx8TEyM/PT6+++qo2bNggNzc3/eUvf9HIkSO1fPlyTZ06VR4eHsrM\n",

"zNSXX34pZ+erL1957bXX9Morr9S4beDAgdaKDRt2aSo/pGVH9WcqDwAAgHrg5uikLn5B6uIXdMV9\n",

"GUX51ZP82OwfL6t3adn+yawUncxKueJ5vi7u6uDtXz3Jv7RPP8SruVwdnRri20ITYLJYLBZrvPD+\n",

"/fvVp08fLVmyRDNnztSBAwd0880369ixY5o2bZr++te/atiwYdqzZ48mTZqkI0eOyN/f/4rXudpk\n",

"/o9//KPmzp1rjdiwUefysjTki3+qtKJcX4x7VAOC2hsdCQAAAE1UeUWFzuVnVe/Jv3yP/vn87J99\n",

"nkkmtfH0rT7L/uUn4Wvl4SOziWX7qD2rTeaDg4NlNps1ffp0SVKvXr3Uvn17ffDBBzp//ryGDRsm\n",

"SerXr5/atGlTXfZ/ysXF5Yol+A4ODtaKDRu14PBmlVaUa3DLDhR5AAAAGMrBbFawl5+Cvfx0ozrX\n",

"uK+wrERxOWnVk/zKkl+5fD+npEiJeZlKzMvU1vOnazzPxcHxJ2fa91f7qmX7vi7uDfntwU5Yrcz7\n",

"+/tr5MiRWrduncaPH6+4uDjFxcXpjjvu0CuvvKITJ06oS5cuOnPmjGJiYtS5c+dff1E0SefzsvRJ\n",

"9V55zmAPAAAA2+Xm6Kyufq3U1a9VjdstFovSi/J/PMt+VcGPzU5TfG66isvLFJ2ZrOjM5Cte08/F\n",

"o3JP/mUn4gv1DlCId3O5OHC18abKqkd+4cKFevDBB/Xiiy/KbDZr0aJFateund555x3deeedMpvN\n",

"qqio0IIFCxQcHPzrL4gmacGRLSqtKNegoFANDAo1Og4AAABQZyaTSf5unvJ387zi/E9lFeVKysu6\n",

"Ysl+bHaaLhRkK6M4XxkX87XnYkKN55lNJrXxaFZV7n9cst/BO0BBHt4s22/krLZn3pqee+45zZkz\n",

"x+gYaADn87M15PP/U0lFuT4d+7BuaNnB6EgAAABAg8kvLVZ8TvplS/Z/3KefW1r8s89zc3RSe+8f\n",

"S/7lS/h9XNwa8DuAtbAmAzbt34e3qKSiXAOD2lPkAQAA0OR4OLmoW/NW6tb8ymX7aUV5Nfblx2Wn\n",

"KiYnTQk56SosK9XxjAs6nnHhitf0d/WsnuaH+gRUnXk/QO28/OTMsn27wZGCzTqfn62PT+2WJD3H\n",

"deUBAACAaiaTSQFuXgpw87piK2pZRbnO5mYqLiftiol+SkGO0orylFaUp90p8TWeZzaZ1NbTr3J/\n",

"/mWT/FCfAAW5e8tkMjXgd4hfQ5mHzXrrSOVUfkAgU3kAAACgthzNDpWTdx9/jWwbXuO+vNJixWWn\n",

"Kabq5HsxOamVn2enKr+sRAm56UrITdcmnazxPHdH56pi/5PL6nn7y8vZtSG/PVShzMMmXcjP1sen\n",

"9kiSnuMM9gAAAEC98HRyUQ//1urh37rG7RaLRRcLc2vsyb+0fP9sboYKykp0NOO8jmacv+I1W7h5\n",

"XXFZvVCfAAV7+cnJzGXFrYUyD5v01pGtKi4v04DAEKbyAAAAgJWZTCYFunsr0N37it+/SyvKdTY3\n",

"o0bBv3RZvYuFudUfu1LiajzPwWRWsNePy/arL6vnE6BANy+W7V8nyjxsTnJBjj6q2iv/m8hR/CUH\n",

"AAAADORkdlAHnwB18Am44r7ckqKqSX7NJfuxOWkqKCtRXE6a4nLSrnieh6Nz5XL9q+zP93RyaYhv\n",

"y+5R5mFz3jq8RcXlZerXop0GM5UHAAAAbJaXs6si/Nsowr9NjdstFouSC3J+smS/cpqfmJep/LIS\n",

"HUk/pyPp5654zUA3r5r78n0qp/ptvZqxbP8ylHnYlJSCHH146Qz2vZjKAwAAAPbIZDKppYePWnr4\n",

"XDGgKykv09ncjBpn2o+rWr6fVpSnlMJcpRTmamdybI3nOZrMaufdvHqCX70/3ztAAW6eTa47UOZh\n",

"U96u2ivft0U7DWnZ0eg4AAAAAOqZs4OjOvq2UEffFlfcl11cWDnNvzTRv+zM+0XlpYrJTlVMdqqU\n",

"eKLG87ycXKoLfqiPvzp4/zjRd3dybqhvrUFR5mEzUgpy9MHJXZIqryvf1P5lDQAAAGjqfFzc1Cug\n",

"rXoFtK1xe4WlQsn5OT8u179sop+Yl6nc0mIdSkvSobSkK14zyN1bHXwC9FKfsVe8rj2jzMNmLDy6\n",

"TcXlZeoTEKyhrZjKAwAAAKhkNpnVytNXrTx9NeQnXaG4vEwJuenVe/IvnWk/JjtNGcX5Si7IUXJB\n",

"jhrbqJAyD5twsSBXH0RXTuV/w155AAAAALXk4uCoMN9AhfkGXnFfZnGB4qqW7He6yrJ+e0aZh01Y\n",

"eHSrispL1TsgWMNbdTI6DgAAAIBGoJmLu5oFBKt3QLDRUeqd2egAQGphrpZemspHjmQqDwAAAAC/\n",

"gjIPwy08sk1F5aWK9G+rEa3DjI4DAAAAADaPMg9DpRXmaUl0lCSuKw8AAAAAtUWZh6EWHq2cykf4\n",

"t9GNTOUBAAAAoFYo8zBM5VR+pySuKw8AAAAAdUGZh2EWHd2uwrLKqfxNbTobHQcAAAAA7AZlHoZI\n",

"L/pxKs8Z7AEAAACgbijzMMSio9tVUFains1ba2SbcKPjAAAAAIBdocyjwWUU5ev9E0zlAQAAAOBa\n",

"UebR4C5N5Xs0b61RbbsYHQcAAAAA7A5lHg0qsyhf75/YIYmpPAAAAABcK8o8GtQ7x75XflmJuvu1\n",

"0s1M5QEAAADgmlDm0WAyi/L17vEfJDGVBwAAAIDrQZlHg/lP1VS+m19LjQ7uanQcAAAAALBblHk0\n",

"iMziAr1btVf+WabyAAAAAHBdKPNoEP899r3ySovV1a+lxjCVBwAAAIDrQpmH1WUWF1TvlX82YqTM\n",

"Jv63AwAAAIDrQauC1f332PfKLS1WeLMgjW3HVB4AAAAArhdlHlaVddlU/jeRTOUBAAAAoD7QrGBV\n",

"i4//oNzSYnX2DdS4dt2MjgMAAAAAjQJlHlaTXVyoxZem8r1GMZUHAAAAgHpCu4LVLD7+g3JKitTZ\n",

"N1DjmcoDAAAAQL2hzMMqKqfy30uqvK48U3kAAAAAqD80LFjFuyd+UHZJkcJ8W2hCSHej4wAAAABA\n",

"o0KZR73LKSnSf49VTeW5rjwAAAAA1DtaFurdu8crp/KdfFpoQkgPo+MAAAAAQKNDmUe9yi0p0n+O\n",

"/bhX3sHM/2IAAAAAUN9oWqhX753YoeySQnX0CdBEpvIAAAAAYBWUedSb3JIiLTq6XRJTeQAAAACw\n",

"JtoW6s37J3ZWT+VvCelpdBwAAAAAaLQo86gXeaXFWnSscio/O+ImpvIAAAAAYEU0LtSL90/sUFZx\n",

"gUK9/TW5fYTRcQAAAACgUaPM47rllRZX75V/hr3yAAAAAGB1tC5ct/dP7FRmcYHae/trcnv2ygMA\n",

"AACAtVHmcV3yS4u16Og2SdIzETfJ0exgcCIAAAAAaPwo87guS6KjlFlcoBCv5poSyl55AAAAAGgI\n",

"lHlcs/zSYi08UjmVfzaSqTwAAAAANBTKPK7Z0ugoZRTnV03lI42OAwAAAABNBmUe16SgtEQLq/bK\n",

"z464kak8AAAAADQgyjyuydLoKKUX5audV3NN7dDL6DgAAAAA0KRQ5lFnTOUBAAAAwFiUedTZByej\n",

"lFaUp2BPP6byAAAAAGAAyjzqpLCsRG8f+XEq78RUHgAAAAAaHGUedbLs5K7qqfxtHXsbHQcAAAAA\n",

"miTKPGqtsKxEbx3ZKkl6mqk8AAAAABiGMo9a+/DkbqUW5qmtZzPdzlQeAAAAAAxDmUetFJaVVk/l\n",

"n+rJVB4AAAAAjESZR618eHKXLhbmqo2nr+5gKg8AAAAAhqLM41cVlpXq7cum8s4OjgYnAgAAAICm\n",

"jTKPX/XRqd1KKcxVaw9f3dmxj9FxAAAAAKDJo8zjFxVdtlf+aabyAAAAAGATKPP4RR+f2qOUghy1\n",

"8vDRnZ2YygMAAACALaDM42cVlZVqwZEtkpjKAwAAAIAtoczjZ31yeq9SCnLU0t1Hd3bqa3QcAAAA\n",

"AEAVq45ai4uL9fzzz2vdunVydXVVRESE5s6dq5EjR1Y/pqCgQLGxsbp48aL8/PysGQd1UFxepgWH\n",

"N0uSnuo5Qi5M5QEAAADAZli1ob300ksymUw6deqUTCaTkpOT1bx5cx08eLD6Ma+//rq2bt1Kkbcx\n",

"n5zao+SCHAW5e+uusH5GxwEAAAAAXMZqZT4/P1+LFy9WUlKSTCaTJCkoKOiKxy1evFivvfbaz75O\n",

"cXGxiouLa9xWXl5ev2FRQ+VUfoukyuvKM5UHAAAAANtitT3zMTEx8vPz06uvvqq+fftq6NCh2rhx\n",

"Y43H7NixQ5mZmZo4ceLPvs5rr70mHx+fGh+7d++2VmxIWn56ry4UZCvQ3Vt3sVceAAAAAGyO1cp8\n",

"WVmZEhIS1LVrV+3du1fz5s3TtGnTlJKSUv2YxYsXa+bMmXJ0/PnJ78svv6zs7OwaH/3797dW7Cav\n",

"xl75HiPk6uhkcCIAAAAAwE9Zbf10cHCwzGazpk+fLknq1auX2rdvryNHjigwMFB5eXn69NNPtWfP\n",

"nl98HRcXF7m4uNS4zcHBwVqxm7zPTu/T+fzKqfzd7JUHAAAAAJtktcm8v7+/Ro4cqXXr1kmS4uLi\n",

"FBcXpy5dukiSli9froiICIWHh1srAuqopLxM86um8k/2GM5UHgAAAABslFXPbLZw4UI9+OCDevHF\n",

"F2U2m7Vo0SK1bt1aUuUS+4cfftiaXx519OmZfTqXn6VANy/dE8ZWBgAAAACwVVYt86Ghodq8efNV\n",

"79uxY4c1vzTqqKS8TPMPVR6rx5nKAwAAAIBNs9oye9iXz87s17n8LLVw89L0zgOMjgMAAAAA+AWU\n",

"eajksjPYP9FjuNyYygMAAACATaPMQ5/H7FdiXqYC3DyZygMAAACAHaDMN3GlFeXVe+WZygMAAACA\n",

"faDMN3FfnPlxKj+DqTwAAAAA2AXKfBNWWlGueZfOYN99uNwcnQ1OBAAAAACoDcp8E/ZlzAGdzcuQ\n",

"v6un7g1nKg8AAAAA9oIy30RVTuU3SZIe6z6MqTwAAAAA2BHKfBP1VcwBJeRmqLmrh2aGDzQ6DgAA\n",

"AACgDijzTVBZRbnmVu2Vf6z7MLk7MZUHAAAAAHtCmW+Cvoo5qITcdPm5eGhW+CCj4wAAAAAA6ogy\n",

"38RUTuWr9sr3YCoPAAAAAPaIMt/EfB17UPHVU3n2ygMAAACAPaLMNyGX75V/tPtQeTi5GJwIAAAA\n",

"AHAtKPNNyIq4w4rLSVMzF3fd14W98gAAAABgryjzTUR5RYXmHtwoiak8AAAAANg7ynwTsSLukGJz\n",

"0uTr4q77utxgdBwAAAAAwHWgzDcB5RUV1Wewf7TbUHkylQcAAAAAu0aZbwJWxh1WTHaqfJzd2CsP\n",

"AAAAAI0AZb6Rq5zK/7hX3svZ1eBEAAAAAIDrRZlv5L6JP6wzVVP5+9krDwAAAACNAmW+Eas8g33l\n",

"XvlHug1hKg8AAAAAjQRlvhFbFX9Ep7MvysfZVfd3HWx0HAAAAABAPaHMN1IVlgq9WbVX/qFuQ+TN\n",

"VB4AAAAAGg3KfCO1Kv6oTmVVTuUf6MJUHgAAAAAaE8p8I1RhqdCbByun8g92HSIfFzeDEwEAAAAA\n",

"6hNlvhFaHX9UJ7NS5O3sqgfZKw8AAAAAjQ5lvpGpsFTojeqp/GCm8gAAAADQCFHmG5nVCcd0MitF\n",

"Xk4uTOUBAAAAoJGizDciNfbKdxsiXxd3gxMBAAAAAKyBMt+IrE04rujMZHk5ueghpvIAAAAA0GhR\n",

"5huJyr3yGyRJD3QdzFQeAAAAABoxynwjse7scZ3ITJank4se6jbE6DgAAAAAACuizDcCFouleq/8\n",

"A11uUDOm8gAAAADQqFHmG4F1Z4/rWMYFeTg662Gm8gAAAADQ6FHm7ZzFYqmxV76Zq4fBiQAAAAAA\n",

"1kaZt3PrL5vKP8JUHgAAAACaBMq8Haucylfulb+/6w1M5QEAAACgiaDM27ENiSd0NOO83B2d9Ui3\n",

"oUbHAQAAAAA0EMq8nbJYLJpTNZW/r8sg+TGVBwAAAIAmgzJvpzYmRetI+jm5Ozrr0e5M5QEAAACg\n",

"KaHM26HL98rPCh+k5q6eBicCAAAAADQkyrwd2pR0UofSkuTm6KTHejCVBwAAAICmhjJvZyr3ylde\n",

"V56pPAAAAAA0TZR5O1NjKt99mNFxAAAAAAAGoMzbkcv3ys8MHyR/N6byAAAAANAUUebtyJZzp3Qw\n",

"LVGuDk56jDPYAwAAAECTRZm3E5fvlZ8ZPkABbl4GJwIAAAAAGIUybye2nj+tA6mXpvLDjY4DAAAA\n",

"ADAQZd4OWCwWvXGgcip/b/gAtXBnKg8AAAAATRll3g5sO39a+1LPysXBUY8zlQcAAACAJo8yb+Mu\n",

"P4P9vZ2ZygMAAAAAKPM2b/v5M9p7MaFyKt+DqTwAAAAAgDJv0yqn8pV75Wd0HqBAd2+DEwEAAAAA\n",

"bAFl3ob9cCFGe5jKAwAAAAB+gjJvoy6/rvw9Yf0VxFQeAAAAAFCFMm+jdlyI0e6UeLk4OOoJpvIA\n",

"AAAAgMtQ5m1Q5VS+8gz2d4f1U0sPH4MTAQAAAABsCWXeBu1IjtWulDg5mx30RI8RRscBAAAAANgY\n",

"yrwNunQG+7vD+qsVU3kAAAAAwE9Q5m3MjgsxikqunMo/2XOE0XEAAAAAADaIMm9j3rhsrzxTeQAA\n",

"AADA1VDmbcjO5FjtTI6Vk9lBT7JXHgAAAADwMyjzNuSNA5V75e/q1FetPH2NDQMAAAAAsFmUeRsR\n",

"lRyrHVVT+ad63mh0HAAAAACADaPM24hLe+Wndeqr1kzlAQAAAAC/gDJvA3anxOuHCzFVU/kRRscB\n",

"AAAAANg4q5b54uJiPfXUU+rUqZN69OihGTNm/OLtTdWl68rf2bGP2ng2MzgNAAAAAMDWOVrzxV96\n",

"6SWZTCadOnVKJpNJycnJv3h7U7QnJV7bz5+Ro8nMVB4AAAAAUCtWK/P5+flavHixkpKSZDKZJElB\n",

"QUE/e3tTdWmv/J2d+qqtl5/BaQAAAAAA9sBqy+xjYmLk5+enV199VX379tXQoUO1cePGn7395xQX\n",

"FysnJ6fGR3l5ubViN6i9KQnadv60HE1mPc1UHgAAAABQS1Yr82VlZUpISFDXrl21d+9ezZs3T9Om\n",

"TVNhYeFVb09JSbnq67z22mvy8fGp8bF7925rxW5Ql/bK396xN1N5AAAAAECtWa3MBwcHy2w2a/r0\n",

"6ZKkXr16qX379kpMTLzq7UeOHLnq67z88svKzs6u8dG/f39rxW4w+y4maOulqXwE15UHAAAAANSe\n",

"1cq8v7+/Ro4cqXXr1kmS4uLiFBcXp0GDBl319i5dulz1dVxcXOTt7V3jw8HBwVqxG8ycqr3yt3Xs\n",

"rXZezQ1OAwAAAACwJ1Y9m/3ChQv14IMP6sUXX5TZbNaiRYvUunXrn729qdifelZbz52Sg8ms2Uzl\n",

"AQAAAAB1ZNUyHxoaqs2bN9f69qbijQOVU/nbO/ZiKg8AAAAAqDOrLbPH1R1ITdTmcyflYDLr6Z43\n",

"GR0HAAAAAGCHKPMN7NIZ7G/r0Esh3kzlAQAAAAB1R5lvQAdTE7UpqWoqz155AAAAAMA1osw3oDeq\n",

"zmB/a2ik2nv7G5wGAAAAAGCvKPMN5FBakjYmRctsMml2BHvlAQAAAADXjjLfQC7tlb81NFKhPkzl\n",

"AQAAAADXjjLfAA6nJWlDYuVU/hmm8gAAAACA60SZbwBvVu2VnxIaqVCfAIPTAAAAAADsHWXeyo6k\n",

"ndP6xBNM5QEAAAAA9YYyb2VvHqqcyk9uH6EOTOUBAAAAAPWAMm9FR9PPad3Z4zKJqTwAAAAAoP44\n",

"Gh2gMTuQmihHk1kT2vdQR98WRscBAAAAADQSlHkrujd8oEa0DpPJZDI6CgAAAACgEaHMW1lbLz+j\n",

"IwAAAAAAGhn2zAMAAAAAYGco8wAAAAAA2BnKPAAAAAAAdoYyDwAAAACAnaHMAwAAAABgZyjzAAAA\n",

"AADYGco8AAAAAAB2hjIPAAAAAICdocwDAAAAAGBnKPMAAAAAANgZyjwAAAAAAHaGMg8AAAAAgJ2h\n",

"zAMAAAAAYGco8wAAAAAA2BnKPAAAAAAAdoYyDwAAAACAnaHMAwAAAABgZyjzAAAAAADYGco8AAAA\n",

"AAB2xmSxWCxGh6irqVOnKiQkxOgYtVJeXq7du3erf//+cnBwMDoOfgXHy/5wzOwPx8y+cLzsD8fM\n",

"/nDM7A/HzL7Y4/Fq166dnnnmmV98jF2WeXuSk5MjHx8fZWdny9vb2+g4+BUcL/vDMbM/HDP7wvGy\n",

"Pxwz+8Mxsz8cM/vSWI8Xy+wBAAAAALAzlHkAAAAAAOwMZR4AAAAAADtDmbcyFxcX/fnPf5aLi4vR\n",

"UVALHC/7wzGzPxwz+8Lxsj8cM/vDMbM/HDP70liPFyfAAwAAAADAzjCZBwAAAADAzlDmAQAAAACw\n",

"M5R5AAAAAADsDGW+HsyePVshISEymUw6ePDgzz5u8eLF6tSpkzp06KCHH35YpaWlDRcSNdTmmG3Z\n",

"skVubm6KjIys/igsLGzYoJAkFRUVacqUKQoLC1NERIRuvvlmnTlz5qqP/fbbbxUeHq5OnTpp6tSp\n",

"ysnJaeC0kGp/zOLj4+Xg4FDj71lMTIwBiTF69Gj17NlTkZGRGjp0qA4cOHDVx/FeZjtqc8x4L7NN\n",

"7733nkwmk77++uur3s97mW35pePF+5htCQkJUefOnauPxfLly6/6uEbzXmbBddu6daslMTHR0q5d\n",

"O8uBAweu+pjY2FhLy5YtLRcuXLBUVFRYbrnlFsuCBQsaNiiq1eaYbd682RIREdGguXB1hYWFllWr\n",

"VlkqKiosFovFMn/+fMvw4cOveFxubq6lRYsWlhMnTlgsFovlySeftLzwwgsNGRVVanvM4uLiLD4+\n",

"Pg0bDleVmZlZ/ecvv/zS0rNnzysew3uZbanNMeO9zPbExcVZBg0aZBk4cKDlq6++uuJ+3stsy68d\n",

"L97HbMsv/W5/SWN6L2MyXw+GDRumNm3a/OJjPv/8c02aNElBQUEymUx67LHH9PHHHzdQQvxUbY4Z\n",

"bIerq6vGjx8vk8kkSRo4cKDi4+OveNyaNWvUq1cvhYeHS5KeeOIJ/p4ZpLbHDLbD19e3+s/Z2dnV\n",

"x+5yvJfZltocM9iWiooKPfTQQ5o/f/7PXiKL9zLbUZvjBfvTmN7LHI0O0FScPXtW7dq1q/48JCRE\n",

"Z8+eNTARaiMmJka9e/eWg4OD7r//fj3xxBNGR4KkuXPnavLkyVfcfrW/ZxcuXFBZWZkcHflxZ6Sf\n",

"O2aSlJ+fr379+qm8vFxTpkzR73//ezk4ODRwQkjSzJkztXnzZknS6tWrr7if9zLb82vHTOK9zJbM\n",

"mTNHgwcPVp8+fX72MbyX2Y7aHC+J9zFbM3PmTFksFvXv319///vfFRAQUOP+xvRexk8E4Gf07t1b\n",

"SUlJ8vHxUVJSksaPHy9/f3/deeedRkdr0l599VWdOXNGGzduNDoKaumXjlnLli117tw5tWjRQhkZ\n",

"GZo2bZr+9a9/6Xe/+50BSbF06VJJ0pIlS/Tiiy/+bDmE7fi1Y8Z7me04evSovvjiC23bts3oKKiF\n",

"2h4v3sdsy7Zt2xQcHKzS0lL94Q9/0KxZsxr1exnL7BtIcHCwEhISqj+Pj49XcHCwgYnwa7y9veXj\n",

"4yNJatOmje6++25t377d4FRN2+uvv64vv/xSa9askbu7+xX3X+3vWcuWLZlkGOjXjpmLi4tatGgh\n",

"SfLz89MDDzzA3zMbMGvWLG3evFnp6ek1bue9zHb93DHjvcx2bN++XfHx8erUqZNCQkIUFRWlRx55\n",

"RG+//XaNx/FeZhtqe7x4H7Mtl96TnJyc9Oyzz171WDSm9zLKfAO57bbbtHLlSiUnJ8tisWjhwoW6\n",

"6667jI6FX3DhwgVVVFRIknJzc/Xtt9+qV69eBqdquubMmaOPP/5Y3333XY19opcbO3as9u/fr+jo\n",

"aEnSW2+9xd8zA9XmmF28eLH6DLLFxcX68ssv+XtmgKysLJ0/f77686+//lrNmzeXn59fjcfxXmY7\n",

"anvMeC+zHY8//rguXLig+Ph4xcfHa+DAgXrnnXf0+OOP13gc72W2obbHi/cx25Gfn6+srKzqzz/+\n",

"+OOrHovG9F5Gma8Hjz76qNq0aaOkpCSNGTNGHTt2lCQ99NBDWrlypSQpNDRUr7zyigYPHqyOHTsq\n",

"ICBAjz76qJGxm7TaHLMvvvhCPXr0UEREhAYOHKibb75Z999/v5Gxm6ykpCQ9//zzysrK0o033qjI\n",

"yEgNGDBAkvSnP/1JCxculCR5eXnpv//9r6ZMmaKOHTsqKSlJf/zjH42M3mTV9ph9//336tWrlyIi\n",

"ItS7d28FBQXp97//vZHRm6Ts7GxNmTKl+mfeggUL9O2338pkMvFeZqNqe8x4L7MPvJfZF97HbFNK\n",

"SopuvPFG9ezZUz169NDWrVurtyI11vcyk8VisRgdAgAAAAAA1B6TeQAAAAAA7AxlHgAAAAAAO0OZ\n",

"BwAAAADAzlDmAQBoIkJCQnTw4ME6PeeFF17QX/7yF6vkAQAA144yDwAAAACAnaHMAwDQxIwYMUIv\n",

"vPCChg4dqg4dOuixxx6rvu/ChQsaM2aMunbtqlGjRikpKan6vtLSUr300kvq37+/IiMjdeeddyoz\n",

"M1OpqakKCQlRVFSUJOnzzz9XRESECgsLG/x7AwCgqaDMAwDQBMXExGjz5s06evSo1q1bp507d0qS\n",

"Zs+erf79++v48eNasmSJNm7cWP2cf/7zn/Lw8NDu3bt18OBB9ejRQ3/4wx8UEBCgDz74QNOnT9fu\n",

"3bv17LPP6rPPPpObm5tR3x4AAI2eo9EBAABAw5s2bZocHR3l6OioyMhIxcTEaNCgQdq4caNef/11\n",

"SVLr1q01adKk6ud8/fXXys7O1hdffCFJKikpUUhIiCRp6NChevDBB3XDDTdo6dKlCgsLa/DvCQCA\n",

"poQyDwBAE+Tq6lr9ZwcHB5WVlV31cSaTqfrPFotF8+fP1+jRo6/62AMHDiggIECJiYn1GxYAAFyB\n",

"ZfYAAKDaqFGj9O6770qq3D+/cuXK6vumTJmiN954QwUFBZKkgoICHTt2TJK0YMECZWZm6tChQ1q0\n",

"aJF++OGHhg8PAEATwmQeAABUmzt3ru677z517dpVrVu31k033VR934svvqji4mINGDCgemJ/6bbX\n",

"X39du3btUosWLbRs2TLNmDFDe/bsUfPmzY36VgAAaNRMFovFYnQIAAAAAABQeyyzBwAAAADAzlDm\n",

"AQAAAACwM5R5AAAAAADsDGUeAAAAAAA7Q5kHAAAAAMDOUOYBAAAAALAzlHkAAAAAAOwMZR4AAAAA\n",

"ADtDmQcAAAAAwM5Q5gEAAAAAsDP/H0iihn2vH4rWAAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-9a355b1e-4c79-4629-8309-6a80c347b5d5\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-9a355b1e-4c79-4629-8309-6a80c347b5d5\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"import seaborn as sns\n",

"def \_plot\_series(series, series\_name, series\_index=0):\n",

" palette = list(sns.palettes.mpl\_palette('Dark2'))\n",

" xs = series['Index']\n",

" ys = series['Weight(Pounds)']\n",

" \n",

" plt.plot(xs, ys, label=series\_name, color=palette[series\_index % len(palette)])\n",

"\n",

"fig, ax = plt.subplots(figsize=(10, 5.2), layout='constrained')\n",

"df\_sorted = \_df\_6.sort\_values('Index', ascending=True)\n",

"\_plot\_series(df\_sorted, '')\n",

"sns.despine(fig=fig, ax=ax)\n",

"plt.xlabel('Index')\n",

"\_ = plt.ylabel('Weight(Pounds)')"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-87a1e79b-4317-43e8-ab19-a3c4a32a7a85\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAABsbElEQVR4nO3deVxU9eLG8WcYYABlSUXcxd3MBTUN9w3T1NTUssyE0jS1a14r\n",

"y1u3bv1ueSuza5tmmWuZpmYulQnulrtoau7iDq4gsgwwc35/VNwsLTCGMwOf9+s1r5xzZg7PdITD\n",

"4/ec77EYhmEIAAAAAAB4DC+zAwAAAAAAgPyhzAMAAAAA4GEo8wAAAAAAeBjKPAAAAAAAHoYyDwAA\n",

"AACAh6HMAwAAAADgYSjzAAAAAAB4GMo8AAAAAAAehjIPAAAAAICHcWmZHzVqlMLDw2WxWBQfH5+7\n",

"PDw8XHXq1FFERIQiIiI0b968PK0DAAAAAACStys33q9fP40dO1atW7f+3bp58+YpIiLiuu/7o3UA\n",

"AAAAABR3Li3zbdu2deXmZbfbZbfbr1lms9lks9lc+nUBAAAAADCTadfMDxo0SA0aNNDgwYN1/vz5\n",

"PK/7tfHjxys4OPiaR69evVwdHQAAAAAAU5lS5tetW6fdu3drx44dKlOmjKKjo/O07rfGjRunlJSU\n",

"ax516tQpjI8AAAAAAIBpXHqa/Y1UqVJFkuTj46PRo0erdu3aeVr3W9c7pd5qtbogMQAAAAAA7qPQ\n",

"R+bT0tKUnJyc+3zu3Llq3Ljxn64DAAAAAAA/cenI/LBhw7R8+XIlJiaqS5cuCgwM1Lfffqu+ffvK\n",

"4XDIMAxVr15ds2bNkiQlJSXdcB0AAAAAAPiJxTAMw+wQBWnMmDGaOHGi2TEAAAAAAHAZ02azBwAA\n",

"AAAAN4cyDwAAAACAh6HMAwAAAADgYSjzAAAAAAB4GMo8AAAAAAAehjIPAAAAAICHocwDAAAAAOBh\n",

"KPMAAAAAAHgYyjwAAAAAAB6GMg8AAAAAgIehzAMAAAAA4GEo8wAAAAAAeBjKPAAAAAAAHoYyDwAA\n",

"AACAh6HMAwCAPNt36awOJieZHQMAgGLP2+wAAADA/RmGoQ/2rNcr276WIUM9qzXU003uVLWgMmZH\n",

"AwCgWKLMAwCAP2R35OjZ7xbp88M7cpctObZbXyXs0YN1muuJRp1UNiDQxIQAABQ/nGYPAABu6ELG\n",

"VfX/5kN9fniHvCwWvXzH3fq21yh1qFhHOYZTM/dvUuuFb+iNHd8qNSvT7LgAABQblHkAAHBd+y6d\n",

"Ufel72rbueMK8vXT7M4P65F6rVSvVAXNvvNhze/6qCLKVFZ6TpYm7VqlVgve0Ed7N8juyDE7OgAA\n",

"RR5lHgAA/M43x/eq9/IpOp2WrGpBZbS0x0i1q1j7mte0LF9DS3uM0NQOA1U9qIwu2dP0ry3L1H7R\n",

"m1pweIccTqdJ6QEAKPoo8wAAIJdhGHp392oNWTVb6TlZal2+ppb0GKEawaHXfb3FYlG38Ppadc/f\n",

"9VrLPgrzD9TJq5c1ev18dVnytuJO7pdhGIX8KQAAKPoo8wAAQJKUmZOtUevm6T/bV0iSouu20Ow7\n",

"H9YttoA/fa+3l1UP1mmuDf2e1rNNuyrI10/7LycqOnaG+n09VdvPnXB1fAAAihXKPAAAUFL6FfX7\n",

"eqq+OBovq8VLr7borVda9JKPlzVf2/H39tXjDdtrY7+xGla/rWxWb21OOqZey9/XkLjZOpx8zkWf\n",

"AACA4oUyDwBAMffDhdPqsfQ9xV84qWBff3165yMaVDfyL23zFluA/tmsm9b3eUr9a90uL4tF35zY\n",

"q46L39LTGxfqbFpKAaUHAKB4oswDAFCMLUv4Qfd8NUVn01NUMzhUy+4eqVYVahbY9iuUDNGbrfsp\n",

"tvdodalST07D0NyDW9V64Rt6ZevXSranF9jXAgCgOKHMAwBQDBmGobfiY/XY6k+U6chW+4q1taTH\n",

"SFULKuOSr1c7JEzTOg3S4m7D1TwsXHZHjibvWatWC17X+z+sVUZOtku+LgAARRVlHgCAYiYjJ0sj\n",

"1szVmztjJUlD6rXSjKhoBfn6ufxr3x5WVQvvGqYZUdGqExKmlKxMvbrta7VZ+IbmHtyqHKfD5RkA\n",

"ACgKvM0OAAAACs/ZtBQNjpul3RdPy8fLqlda9NKA2s0LNYPFYlFU5VvVoWIdLTqyUxN2rtTptGQ9\n",

"vXGhpu5Zr7FN71TXKrfJYrEUai4AADwJZR4AgGJi5/mTGhI3S0kZqbrFFqAPOw5UZLnqpuWxennp\n",

"3lpNdXe1hpq1f5Pe3r1ah1LO6dFVc9QktIr+cXtXU/MBAODOOM0eAIBiYPHRePX7+gMlZaSqTkiY\n",

"lt/9uNsUZT9vHw2t30bf9RurUQ07yM/qox3nT6jf11M1aOV07bt01uyIAAC4Hco8AABFmNNw6o0d\n",

"3+rxtZ/J7shRVOW6Wtx9uKoEljI72u8E+fppbNMu2tjvaT1U5w5ZLV5adeqAunz5tp5YN08nUy+Z\n",

"HREAALdBmQcAoIhKy7Zr6KpPNGnXKknS8PrtNK3jIAUWwkR3f0VYQJDGt7xHq+8Zo7vDG8qQoYVH\n",

"dqrdojf1r81LdSkzzeyIAACYjjIPAEARdPpqsu75aoq+ObFXvl5WvdX6Xj3X7C5ZvTzn0F89uIwm\n",

"dxig5Xc/rlblayjL6dBH+zaq5YLXNSk+TunZWWZHBADANJ5zRAcAAHmy/dxxdV/6rvZdOqsyfiU1\n",

"v+tQ3VurqdmxblqjMpX0WZch+uTOR1S/VAVdzbbrjZ0r1Wrh65q1f5OyuZ0dAKAYoswDAFCELDi8\n",

"Q/d+PVUXMq+qXqnyWnb3SN0eVtXsWH+ZxWJRu4q19VXPx/VeuwdUNbCUzmdc1T++X6wOiyZqydFd\n",

"chpOs2MCAFBoKPMAABQBDqdTr277WqPXz1eW06EuVerpi26PqVLJW8yOVqC8LF7qVb2RVt8zRv+O\n",

"7KUyfiWVkHpRI9bOVY+l72n9mUNmRwQAoFBQ5gEA8HBXs+0asmq23v9hrSRpVMMO+rDjQJXwsZmc\n",

"zHV8rd6KubWFNvZ7Wk82jlIJb1/tvnhaD6yYpgdWfKTdF06ZHREAAJeizAMA4MFOpF5Sr2Xva+XJ\n",

"H2WzeuudtvdrbNMu8rIUj0N8CR+b/h4RpY39xuqRW1vKx8uq9WcOq9vSdzVizac6duWC2REBAHCJ\n",

"4nGkBwCgCNqceEw9lr6nA8lJKusfqAV3DdM9NSLMjmWKMv4l9XJkT63t86T61Ggsiyxacmy3Oiya\n",

"qOe+X6xz6almRwQAoEBR5gEA8EBzD27V/Ss+0iV7mhqUrqhldz+uxqGVzY5luiqBpfR22/5a0etv\n",

"6lCxjnIMp2bu36RWC1/XGzu+VWpWptkRAQAoEJR5AAA8iMPp1EtblunpjQuV7XSoR3gDLeo2TBVK\n",

"BJsdza3UK1VBs+98WPO7PqqIMpWVkZOtSbtWqdWCN/TR3g2yO3LMjggAwF9CmQcAwENcycpUdOwM\n",

"fbh3gyRpTESUJrcfIH9vX5OTua+W5WtoaY8RmtphoGoEh+qSPU3/2rJM7RZN0ILDO+Rwcjs7AIBn\n",

"oswDAOABjl25oF7L3tea0wflZ/XRlPYDNKZxlCwWi9nR3J7FYlG38PqK6z1ar7Xso7CAIJ26mqzR\n",

"6+ery5K3FXdyvwzDMDsmAAD5QpkHAMDNbTx7RHcve1+HUs6pXECQFnUbph7VGpody+N4e1n1YJ3m\n",

"2tD3KY1r2lVBvn7afzlR0bEz1O/rqdp+7oTZEQEAyDPKPAAAbmzO/s16cMU0JdvT1ahMJS2/+3E1\n",

"LFPJ7Fgezd/bVyMbttfGfmP1WP22slm9tTnpmHotf1+D42bpUPI5syMCAPCnXFrmR40apfDwcFks\n",

"FsXHx+cuDw8PV506dRQREaGIiAjNmzcvd92hQ4fUsmVL1a5dW82aNdPevXtdGREAALeU43To+U1f\n",

"6tnvv1CO4VTv6hFacNcwhQUEmR2tyLjFFqDnm3XT+j5PqX+t2+VlsWjFiX3qtPgtPbVhgc6kpZgd\n",

"EQCAG3Jpme/Xr582bNigqlWr/m7dvHnzFB8fr/j4ePXv3z93+bBhwzR06FAdPHhQzzzzjGJiYlwZ\n",

"EQAAt5NsT9dDK6drxo/fS5KeadJF77TtL39vH5OTFU0VSobozdb9FNt7tLpUqSenYeizQ9vUZuEb\n",

"emXr10q2p5sdEQCA33FpmW/btq0qVcr7qYDnzp3Ttm3bNHDgQElS3759dfLkSR0+fPi6r7fb7bpy\n",

"5co1D4fDUSDZAQAww5GU87p72ftaf+awArx99WHHgfpbow5MdFcIaoeEaVqnQVrcbbjuCAuX3ZGj\n",

"yXvWqtWC1/X+D2uVkZNtdkQAAHKZds38oEGD1KBBAw0ePFjnz5+XJJ08eVLly5eXt7e3pJ9mn61S\n",

"pYpOnLj+hDTjx49XcHDwNY8tW7YU2mcAAKAgrTt9SD2XvadjVy6oQolgLe7+mO6qWt/sWMXO7WFV\n",

"teCuYZoZFaM6IWFKycrUq9u+VpuFb+jTg1uU42TgAABgPlPK/Lp167R7927t2LFDZcqUUXR09E1t\n",

"Z9y4cUpJSbnm0bx58wJOCwCAaxmGoen7vtNDK6crJStTTUOraPndj6teqQpmRyu2LBaLOlWuq297\n",

"PaH/trlXFUuEKDH9isZuXKSoxf/V18f3cDs7AICpvM34olWqVJEk+fj4aPTo0apdu7YkqXLlyjp7\n",

"9qxycnLk7e0twzB04sSJ3Nf/ls1mk81mu2aZ1Wp1bXgAAApQttOhf25aojkHNkuS+tVootda9ZHN\n",

"asohGr9h9fJSv5pN1SO8oWYf2KS3d63W4ZTzenTVHDUJraJxt3dVi3LVzY4JACiGCn1kPi0tTcnJ\n",

"ybnP586dq8aNG0uSypYtqyZNmmjOnDmSpIULF6pSpUqqWbNmYccEAMDlLmemacCKaZpzYLMssui5\n",

"2+/SW23upci7IT9vHz16Wxtt7DdWoxp2kL+3j3acP6F7v56qQSuna9+ls2ZHBAAUMxbDheeIDRs2\n",

"TMuXL1diYqJKly6twMBAffvtt+rbt68cDocMw1D16tU1adIkhYeHS5IOHDigmJgYXbx4UUFBQZo+\n",

"fboaNGiQ5685ZswYTZw40UWfCACAgnEwOUkPx87U8dRLKuHtq/faP6CoyreaHQt5lJR+RZN2rdIn\n",

"B7bIYThlkUV9akToqcadVTmwlNnxAADFgEvLvBko8wAAd7fq1AGNXPOpUrPtqlzyFk2PilbdW8qZ\n",

"HQs34WjKBb2x41stTdgtSfL1suqhupEa1aiDSvuVNDkdAKAoM202ewAAihvDMDR1z3rFxM5QarZd\n",

"d4RV07K7R1LkPVj14DKa3GGAlt/9uFqXr6ksp0PT9m1UqwVv6L/xcUrLtpsdEQBQRFHmAQAoBFmO\n",

"HD21caFe3rpcTsPQ/bVu19wugxm9LSIalamkz7oO0ad3DlaD0hV1NduuCTtXqvXCNzTzx++Vze3s\n",

"AAAFjBl2AABwsYuZVzV01RxtTkqQl8WiF5p11+B6rWSxWMyOhgLWtmItta5QQ0uP/aDXd3yr46kX\n",

"9dymLzV17wY90+RO9ajWQF4WxlIAAH8dRxMAAFzox0uJ6r70XW1OSlCgj00zo2I05LbWFPkizMvi\n",

"pV7VG2n1PX/XvyN7qYxfSR1PvagRa+eq+9L3tP7MIbMjAgCKAMo8AAAu8u2Jfeq9/H2dupqsqoGl\n",

"taTHSHWoVMfsWCgkvlZvxdzaQhv7Pa2nGndWCW9f/XDxtB5YMU0PrPhIuy+cMjsiAMCDUeYBAChg\n",

"hmHovd1rNDhuttJystSqfA0t6zFCtULKmh0NJijhY9PoiE767t6xGlyvlXy8rFp/5rC6LX1Xw1d/\n",

"qqMpF8yOCADwQJR5AAAKUGZOtkavn6/x27+RIUMP1blDc+58RLf4lTA7GkxW2q+kXrrjbq3t86T6\n",

"1GgsiyxamrBbHb+YqH98v1jn0lPNjggA8CCUeQAACsi59FTd982HWnhkp6wWL70S2UvjW94jHy+r\n",

"2dHgRqoEltLbbftrRa9R6lipjnIMp2bt36RWC1/XGzu+VWpWptkRAQAegDIPAEAB2HvxjHose1c7\n",

"zp9QsK+f5tz5sKJvbWF2LLixeqXKa1bnh/X5XUPVOLSyMnKyNWnXKrVc8Lo+2rtBdkeO2REBAG6M\n",

"Mg8AwF/0VcIe9f5qss6kpah6UBkt7TFSbSrUMjsWPESLctW1pPsIfdhxoGoEh+qyPV3/2rJM7RZN\n",

"0ILD2+VwOs2OCABwQ5R5AABukmEYmhQfp6Gr5ygjJ1vtKtTSkh4jVD041Oxo8DAWi0V3Va2vuN6j\n",

"9XqrPgoLCNKpq8kavf5zdVnytuJO7pdhGGbHBAC4Eco8AAA3ISMnW4+v/Uxv7FwpSXrk1paa2TlG\n",

"IbYAk5PBk3l7WTWgdnNt6PuUxjXtqmBfP+2/nKjo2Bnq9/VUbT93wuyIAAA3QZkHACCfEtOvqN/X\n",

"H+jLY7vkbfHSf1reo5cje8qbie5QQPy9fTWyYXtt6DdWj9VvK5vVW5uTjqnX8vc1OG6WDiWfMzsi\n",

"AMBklHkAAPJh14VT6r70Xe26cEohtgB92mWwBta5w+xYKKJusQXo+WbdtL7v07q/1u3ysli04sQ+\n",

"dVr8lp7asEBn0lLMjggAMAllHgCAPFpydJf6fDVFSelXVDukrJb1GKmW5WuYHQvFQIUSwZrQup/i\n",

"ev9dXarUk9Mw9NmhbWqz8A39e+tXumxPNzsiAKCQUeYBAPgTTsOpCTtXasTaubI7ctSxUh192X2E\n",

"woNKmx0NxUytkLKa1mmQvuw+XHeEhcvuyNGUPevUesHrem/3GmXkZJsdEQBQSCjzAAD8gfTsLA1f\n",

"M1f/jY+TJA27rY2md4pWoK+fyclQnDUtW1UL7hqmmVExqntLOaVkZWr89m/UZuEb+vTgFuU4HWZH\n",

"BAC4GGUeAIAbOJOWoj5fTdHyhB/k42XVm6376Z/Nu8vqxeET5rNYLOpUua5W9Byl/7a5VxVLhCgx\n",

"/YrGblykqMX/1dfH93A7OwAowrzNDgAAgDvacf6EhsTN1rmMVJWyldBHnR5S87Bws2MBv2P18lK/\n",

"mk3VI7yhZh/YpLd3rdbhlPN6dNUcNQmtonG3d1WLctXNjgkAKGAMLQAA8BuLjuzUvV9P1bmMVNW9\n",

"pZyW3z2SIg+35+fto0dva6ON/cbqiUYd5e/tox3nT+jer6dq0Mrp2nfprNkRAQAFiDIPAMDPnIZT\n",

"/9n+jUatmye7I0d3Vr5Vi7sPV+XAUmZHA/IsyNdPTze5Uxv6Pq1BdSPlbfHSqlMH1OXLtzVq3Tyd\n",

"TL1kdkQAQAGgzAMAICkt265HV83Ru7vXSJJGNmivjzo9pJI+NnODATcpLCBIr7borVX3jNHd4Q1l\n",

"yNCiIzvVbtGbenHzUl3MvGp2RADAX0CZBwAUe6euXlbv5ZO14sQ+2azemtS2v8bd3lVeFg6T8HzV\n",

"g8tococB+urux9WmQk1lOR2atm+jWi14Q/+Nj1Natt3siACAm8BvKQCAYm1rUoK6L31XP15OVKh/\n",

"Sc3vOlR9azQ2OxZQ4BqWqaS5XYbo0zsHq0HpirqabdeEnSvVeuEbmvHj98py5JgdEQCQD5R5AECx\n",

"Nf/QNt33zYe6mJmm20qV1/Iej6tp2SpmxwJcqm3FWlp+90i93+4BVQ0srfMZV/X8pi/V4Yu39OXR\n",

"XXIaTrMjAgDygDIPACh2HE6n/m/rVxqzYYGynQ7dVfU2fdFtuCqUDDE7GlAovCxe6lm9kVbf83e9\n",

"EtlLof4ldTz1okaunavuS9/TutOHzI4IAPgTlHkAQLGSmpWpR+Jm6YM96yRJTzTqqA86PKgAH1+T\n",

"kwGFz9fqrehbW2hD36f1VOPOKulj0w8XT2vAt9N0/zcfadeFU2ZHBADcAGUeAFBsHE+9qF7L31fc\n",

"qf2yWb31frsH9HSTO5noDsVeCR+bRkd00sZ+T2twvVby8bJqw9nD6r70XQ1f/amOplwwOyIA4Df4\n",

"7QUAUCx8n3hUPZa+p4PJ5xTmH6iFdw1Tz+qNzI4FuJXSfiX10h13a12fJ9W3RmNZZNHShN3q+MVE\n",

"/eP7xTqXnmp2RADAzyjzAIAi75MDW/TANx/psj1djcpU0rK7H1dEaGWzYwFuq3JgKU1q218reo1S\n",

"x0p1lGM4NWv/JrVa+Lpe375CV7IyzY4IAMUeZR4AUGTlOB16cfNSPfPdIuUYTvWs1lAL7hqq8iWC\n",

"zY4GeIR6pcprVueHteCuoWoSWkUZOdl6e/dqtVrwuj7cu152bmcHAKahzAMAiqQUe4aiY2dq2r6N\n",

"kqSnGnfWe+0ekL83E90B+RVZrrq+7D5cH3YcqJrBobpsT9dLW5ar7cIJWnB4uxxObmcHAIWNMg8A\n",

"KHKOplxQz+Xva+3pg/L39tEHHR7U6IhOslgsZkcDPJbFYtFdVesrtvdovd6qj8oFBOl0WrJGr/9c\n",

"d345SXEn98swDLNjAkCxQZkHABQpG84c1t3L3tORlPMqHxCsL7o9pu7hDcyOBRQZ3l5WDajdXOv7\n",

"Pq1/3H6Xgn39dCA5SdGxM9Tv6w+0/dxxsyMCQLFAmQcAFBkzf/xeD377sVKyMtQ4tLKW3/246peu\n",

"aHYsoEjy9/bRiAbttLHfWA2v3042q7c2JyWo1/LJGhw3S4eSz5kdEQCKNMo8AMDjZTsd+sf3i/Xc\n",

"pi/lMJzqU6OxPu86VGUDAs2OBhR5IbYAPdfsLq3v+7Tur3W7vCwWrTixT50Wv6UnNyzQmavJZkcE\n",

"gCKJMg8A8GiX7el66NvpmrV/kyyy6NmmXTWpzX3y8/YxOxpQrFQoEawJrfsprvff1aVKPTkNQ/MO\n",

"bVObRRP0761f6bI93eyIAFCkUOYBAB7rcPI53b30PW04e1gB3r76qONAPd6wPRPdASaqFVJW0zoN\n",

"0pfdh+uOsGqyO3I0Zc86tV7wut7bvUYZOVlmRwSAIoEyDwDwSGtOH1TP5e8rIfWiKpUM0eLuw9Wl\n",

"6m1mxwLws6Zlq2rBXUM1MypGdW8pp5SsTI3f/o1aL5ygTw5sUY7TYXZEAPBolHkAgEcxDEMf7d2g\n",

"QSun60pWppqVraplPR5XvVLlzY4G4DcsFos6Va6rFT1H6b9t7lOlkiFKSr+iZ75bpE6L/6uvEvZw\n",

"OzsAuEneZgcAACCvshw5em7Tl5p7cKskqX+tpnq1xT2yWTmcAe7M6uWlfjWb6O5qDTV7/yZN2rVK\n",

"R1LOa+jqOWocWln/uP0utShX3eyYAOBRGJkHAHiES5lpemDFNM09uFUWWfTPZt00oVU/ijzgQWxW\n",

"bw25rbU29hurJxp1lL+3j3aeP6l7v56qh76drn2XzpgdEQA8BmUeAOD2DlxOUo+l72lz0jGV9LFp\n",

"RlS0htVvy0R3gIcK8vXT003u1Ma+YzWobqS8LV5affqAunz5jkatm6eTqZfMjggAbo8yDwBwa3En\n",

"96vX8vd14uolVQ0spSU9RqhT5bpmxwJQAMoGBOrVFr21us8Y9azWUIYMLTqyU20XvakXNy/Vxcyr\n",

"ZkcEALdFmQcAuCXDMDTlh3WKiZ2pq9l2RZarpqU9Rqp2SJjZ0QAUsGpBZfR++wH66u7H1aZCTWU7\n",

"HZq2b6NaLXhDb8XHKi3bbnZEAHA7Li3zo0aNUnh4uCwWi+Lj43+3fvr06bJYLFq8eHHusvbt26ta\n",

"tWqKiIhQRESE3nrrLVdGBAC4IbsjR09uWKB/b/tKhgw9WLu5Pr1zsEr5lTA7GgAXalimkuZ2GaK5\n",

"XQarYemKuppt15s7Y9VqwRua8eP3ynLkmB0RANyGS2cN6tevn8aOHavWrVv/bl1CQoI+/PBDRUZG\n",

"/m7dW2+9pd69e7syGgDATV3IuKohq2Zr27nj8rJY9GLzHnrk1pZcHw8UI20q1FKru2to2bEf9NqO\n",

"b3U89aKe3/SlPty7XmObdNHd1RrIy8IJpgCKN5f+FGzbtq0qVar0u+VOp1NDhgzRO++8I5vN5soI\n",

"AAAPsu/SWXVf+q62nTuuIF8/ze78sAbXa0WRB4ohL4uXelZvpDV9xuiVyF4K9S+p46mXNHLtXHVb\n",

"8q7WnT5kdkQAMJUp/6Q5ceJEtWrVSk2bNr3u+meffVYNGjRQ//79dfTo0Rtux26368qVK9c8HA6H\n",

"q2IDAFzom+N71Xv5ZJ1OS1a1oDJa2mOk2lWsbXYsACbz8bIq+tYW2tD3aT3duLNK+ti059IZDfh2\n",

"mu7/5iPtunDK7IgAYIpCL/N79uzRwoUL9fzzz193/ezZs7V//37t3r1bbdq0UY8ePW64rfHjxys4\n",

"OPiax5YtW1wVHQDgAoZh6N3dqzVk1Wyl52SpdfmaWtJjhGoEh5odDYAbKeFj0xMRnbSx39MaUq+V\n",

"fL2s2nD2sLovfVfDV3+qoykXzI4IAIXKYhiG4eovEh4ersWLFysiIkKTJ0/Wyy+/nHt6fWJiooKC\n",

"gvTSSy9p+PDhv3uvn5+fTp8+rdKlS/9und1ul91+7eym//znPzVp0iTXfBAAQIHKzMnW0xsX6ouj\n",

"8ZKk6Lot9K87esjHy2puMABu72TqJU3YuVKLjsTLkCFvi5ceqN1MoyM6KSwgyOx4AOByhT4yP3z4\n",

"cJ09e1YJCQlKSEhQZGSkpk6dquHDhysnJ0dJSUm5r124cKHCwsKuW+QlyWazKSgo6JqH1covgADg\n",

"CZLSr+jeb6bqi6Pxslq89GqL3nqlRS+KPIA8qRxYSpPa9teKXqPUqVJd5RhOzT6wWa0XvqHXt6/Q\n",

"laxMsyMCgEu5dDb7YcOGafny5UpMTFSXLl0UGBiow4cP3/D1drtd3bt3l91ul5eXl8qUKaMlS5a4\n",

"MiIAwAQ/XDitR+Jm6Wx6ioJ9/TW1w4NqVaGm2bEAeKB6pcprZucYbUo8qle3faMd50/o7d2rNfvA\n",

"Zv2tYQcNqhspP28fs2MCQIErlNPsC9OYMWM0ceJEs2MAAG5gWcIPGr1uvjId2aoZHKrpUdGqFlTG\n",

"7FgAigDDMLTixD79Z/s3OpxyXpJUsUSInmrcWX1qNJbVi9vZASg6+IkGACgUhmHorfhYPbb6E2U6\n",

"stWuYm192X0ERR5AgbFYLOpa9TbF9h6tN1r1VbmAIJ1OS9bfN3yuO7+cpNiTP6qIjWMBKMZcepo9\n",

"AACSlJGTpTHrF2hpwm5J0pB6rfR8s27y5vp4AC7g7WXVA7WbqXf1CE3/8Tu9t3u1DiQnKSZ2ppqH\n",

"hesfTe/S7WFVzY4JoABl5mTrXEaqzqWnKinjis6lp+pcRqqS0q8oKSNV59KvqH+t2zXkttZmRy0w\n",

"lHkAgEudTUvR4LhZ2n3xtHy8rHqlRS8NqN3c7FgAigF/bx+NaNBOA2o303u71+rjHzdqS1KCen81\n",

"WV2q1NMzTbuodkiY2TEB/IG0bLuS0lN17lcFPTH9Sm5xP5dxRUnpqUrJyvjTbR27UrRuYUmZBwC4\n",

"TPz5kxocN0tJGam6xRagDzsOVGS56mbHAlDMhNgC9Fyzu/RwvZZ6Kz5W8w5t04oT+7Ty5I+6t2ZT\n",

"PRkRpQolQ8yOCRQbhmEoNduupPQrOpc7cv6/Yv7rkfWr2fY/3+DPbFZvhfkHqWxAoMr6ByosIEhh\n",

"P/+5bECQqhexS/uYAA8A4BKLj8bryQ0LZHfkqE5ImKZHRatKYCmzYwGADiWf02vbV+ibE3sl/VQA\n",

"Hr61pUY2bK9bbAEmpwM8l2EYumxPv2Yk/ZdT3H/570+nvqcq05Gd5+2W8PZV2YCgnwv6TyX9l4Ie\n",

"5h+osgGBCvMPUpCvnywWiws/oXuhzAMACpTTcOrNnbGatGuVJCmqcl290/Z+Bfr6mZwMAK61/dwJ\n",

"vbrta21OOiZJCvb10/AG7TW4Xkv5e/uanA5wH07DqYuZaT9df/7ziPkvxfzXp7yfz0hVltOR5+0G\n",

"+/qp7HVH0oN+Lug/FfaSPjYXfjrPRZkHABSY9OwsPbF+nr4+/tNo12P122pc067cDgqA2zIMQ6tO\n",

"HdD47d9o/+VESVJYQJDGRESpf62mTNSJIi3H6dD5jKs/ne7+m8njkn41sn4h46ochjPP2y1lK/Gr\n",

"Mn79kfSy/kHy9/Zx4acr+rhmHgBQIE5fTdbDcTO179JZ+XpZ9VrLPrq3VlOzYwHAH7JYLOpUua7a\n",

"V6ytL47Ga8LOb3XqarKe+W6Rpu5dr2eadNFdVW8rVqfuwvPZHTk6/8tM7r8aSU/6edkvxf1iZpoM\n",

"5W1s18tiURm/kj+X8l+PpAflLgvzD1Kof0n5WqmZhYH/ywCAv2z7ueMasmq2zmdcVRm/kvqo40Pc\n",

"9gmAR7F6ealfzSa6u1pDzd6/SZN2rdKRlPMaunqOGodW1rimXdWyfA2zY6KYy8jJ+mmCuNxrz683\n",

"op6qZHt6nrfpbfFSaG4Z/3n0/OeR819PHlfGrwRnqrgZTrMHAPwlCw7v0NiNC5XldKheqfL6uNMg\n",

"VSp5i9mxAOAvSc3K1JQ96zR173pl5Pw0UVeHinU07vYuqleqgsnpUJQYhqGr2fb/XX/+m8nj/lfY\n",

"ryg1nzO7l/UP/NVIepDKBfz6+vSflpXyC5CXhcvhPBEj8wCAm+JwOvXajhV6/4e1kqQuVerp7bb9\n",

"VYJJagAUAYG+fnq6yZ2KrttCk3bF6ZMDW7T69AGtOX1Q99SI0FONO3OHDvwhwzCUnJXxUylPv5J7\n",

"27Vfj6T/Muv7L/9glBf+3j4K8//NRHG/mun9l2Uhvv5cHlLEMTIPAMi3q9l2/W3tZ1p58kdJ0qiG\n",

"HfRUk878yz6AIuvYlQt6Y8e3WnJstyTJx8uqh+rcoSciOqq0X0mT06EwOQ2nLmWm61zGFSWmX3u7\n",

"tXO/KujnM67K7sjJ83aDfP1+NZL+00RxYQHXzvRe1j9QJX1slHRIoswDAPLpZOolxcTO1IHkJNms\n",

"3prQqp/uqRFhdiwAKBS7L5zSf7av0LozhyRJJX1sGla/jYbe1oYzkzxcjtOhC5lpP00Ul3tf9N9P\n",

"Hnch46py8jGze4gt4H/F/Fezu/9yffovI+rcDhH5RZkHAOTZ5sRjenTVHF2yp6msf6CmdRqkxqGV\n",

"zY4FAIVu/ZlDGr/tG+2+eFqSVMavpJ5o1FEP1mnOTN5uJsuR89Pt1zJ+Kum/FPTfTiJ3ISPvM7tb\n",

"ZFEZ/xI/j6T/757o/xtJ/+k0+FD/QNn4+wAXocwDAPLks4NbNe77xcp2OtSgdEVN6zRIFUoEmx0L\n",

"AEzjNJxanrBHr21foYTUi5KkqoGl9HSTO9WzWkMuPXKxjJzs/00Ud81I+k/LEn8u6ZfzMbO71eKl\n",

"Mv4lf5oo7leTx/12JD3UvyQzu8N0lHkAwB9yOJ16ZdtXmrp3gySpR3gDvdXmXk4HBICfZTsdmntw\n",

"q96Kj9X5jKuSpPqlKmjc7V3VtkItrm/Op6vZ9mvvif7zrO7nfjOSfiUrM8/b9PWyKtT/txPF/XIb\n",

"tl+KeqBK2UrI6sU/wsAzcM4HAOCGrmRlasSaT7Xm9EFJ0piIKI2O6MhoEwD8io+XVYPqRqpvjcb6\n",

"aO8GTd6zTnsundGD336sVuVraFzTrooo5pckGYahlKyM3JncE391u7VfJo/7paSn52Tlebt+Vh+F\n",

"/Wo29+tNHhfmH6gQWwD/qIIih5F5AMB1JVy5qIdjZ+pQyjn5WX303zb3qke1hmbHAgC3dykzTW/v\n",

"WqVZ+zcpy+mQ9NNZTWObdFH14DImpytYTsOpy/b03Fuu/W8k/ffXpudnZveSPrb/zeD+cyH/9W3Y\n",

"fjnlPZCZ3VGMUeYBAL+z8ewRDVv9iZLt6SoXEKSPOw1SwzKVzI4FAB7lZOolvbkzVguP7JQhQ1aL\n",

"lwbUbqbREZ0UFhBkdrw/5HA6dSHzam4hT/z5Pun/K+g/lfTzGan5mtk92Nf/NyPpQbmnvP+vuAcp\n",

"wIdLuYA/Q5kHAFxjzv7Nen7Tl8oxnGpUppI+7jTI7X/pBAB3tu/SWb22fYXiTu2XJPl7++jReq31\n",

"WIN2CvL1K9Qs2U6Hzv/qGvSkX42c/3ok/ULmVTnzURNK+5XILeRhP8/m/svkceVyJ40LlJ+3jws/\n",

"HVC8UOYBAJJ+ur/uS1uWa/qP30mSeleP0But+sqfX7wAoEBsTjymV7d9re3nT0iSbrEF6G8NO2hQ\n",

"3ci/XHIzc7JzC3nuLdhyn/9c3NNTdcmeludtelksCvUr+fMkcdfegu1/I+lBCvUvKR9mdgcKHWUe\n",

"AKBke7qGr/lU688cliQ906SLHm/YnusQAaCAGYahFSf26bXtK3Qo5ZwkqWKJED3VuLP61Gj8u5nU\n",

"07LtP1+PfuVXRT31VyPpPz1PycrIcwYfL6tC/UvmnuKee8r7z6e4/1LcS/sxszvgzpjNHgCKuaMp\n",

"5xUTO1NHr1yQv7eP3m7bX3dVrW92LAAokiwWi7pWvU1Rlevq88M79ObOlTqdlqy/b/hcU/asU91b\n",

"yuVOHpeUfkVp+ZjZ3Wb1VtivJon73S3Yfi7qITZ/7koCFAGUeQAoxtadPqThaz5RSlamKpQI1vRO\n",

"0bqtdAWzYwFAkeftZdUDtZupd/UIzfjxO727e7UOJCfpQHLS715bwttXZX8u5+V+niTud7dg8w9U\n",

"kK8fZ1QBxQhlHgCKIcMwNOPH7/WvLcvkMJxqGlpFH3V6SKH+gWZHA4Bixd/bR8MbtNMDtZtp4ZGd\n",

"chrOX12b/tNIegkfm9kxAbghyjwAFDPZTof+uWmJ5hzYLEnqV6OJXmvVRzYrhwQAMEuILUCD67Uy\n",

"OwYAD8JvbgBQjFzOTNPQ1Z/o+8Sjssiif9zeVY/Vb8tpmQAAAB6GMg8AxcSh5HOKiZ2p46kXVcLb\n",

"V++1f0BRlW81OxYAAABuAmUeAIqBVacOaOSaT5WabVflkrdoelS06t5SzuxYAAAAuEmUeQAowgzD\n",

"0Ef7Nuj/tn4lp2HojrBwTe04UKX9SpodDQAAAH8BZR4AiqgsR47Gfb9Y8w5tkyTdX+t2vdqit3yZ\n",

"6A4AAMDj8RsdABRBFzOvauiqOdqclCAvi0UvNOuuwfVaMdEdAABAEUGZB4Ai5sdLiXo4boZOXU1W\n",

"oI9N77cfoA6V6pgdCwAAAAWIMg8ARcjKE/v0+NrPlJaTpaqBpTUjKlq1QsqaHQsAAAAFjDIPAEWA\n",

"YRiavGedxm/7RoYMtSpfQ1PaD9AtfiXMjgYAAAAXoMwDgIfLzMnWs999oQVHdkiSHqpzh16O7Ckf\n",

"L6vJyQAAAOAqlHkA8GDn0lP16KrZ2n7+hKwWL710x92KubWF2bEAAADgYpR5APBQey+e0cNxM3Um\n",

"LUXBvn6a0uFBtalQy+xYAAAAKASUeQDwQF8l7NET6+cpIydb1YPKaEZUtKoHh5odCwAAAIWEMg8A\n",

"HsQwDL29a5Xe2LlSktSuQi291/4BhdgCTE4GAACAwkSZBwAPkZGTrac2LtCXR3dJkh65taVeaN5d\n",

"3kx0BwAAUOxQ5gHAAySmX9HguFnadeGUvC1e+neLXhpY5w6zYwEAAMAklHkAcHO7LpzSI3GzlJR+\n",

"RSG2AE3t8KBalq9hdiwAAACYiDIPAG5s6bHd+vv6z5XpyFat4LKaHhWt8KDSZscCAACAySjzAOCG\n",

"nIZTE+Pj9N/4OElSx0p19G67BxTk62dyMgAAALgDL1dufNSoUQoPD5fFYlF8fPzv1k+fPl0Wi0WL\n",

"Fy/OXXbu3Dl17dpVtWrVUv369bVu3TpXRgQAt5OenaXha+bmFvlht7XR9E7RFHkAAADkcmmZ79ev\n",

"nzZs2KCqVav+bl1CQoI+/PBDRUZGXrP82WefVWRkpA4dOqTp06drwIABys7OdmVMAHAbZ9JS1Oer\n",

"KVqe8IN8vKx6s3U//bN5d1m9XPrjGgAAAB7Gpb8dtm3bVpUqVfrdcqfTqSFDhuidd96RzWa7Zt38\n",

"+fP12GOPSZKaNWumChUqaO3ata6MCQBuYcf5E+qx9F3tuXRGpWwlNK/ro+pf63azYwEAAMANmXLN\n",

"/MSJE9WqVSs1bdr0muUXL15Udna2ypUrl7ssPDxcJ06cuO527Ha77Hb7NcscDkfBBwYAF1t0ZKee\n",

"3rhQdkeO6t5STtM7DVLlwFJmxwIAAICbKvQyv2fPHi1cuLBAroUfP368XnrppWuW/fa0fQBwZ07D\n",

"qdd3fKt3d6+RJN1Z+Va93e5+lfSx/fEbAQAAUKwV+kWY69evV0JCgmrVqqXw8HBt2rRJQ4cO1eTJ\n",

"k1W6dGl5e3srMTEx9/UJCQmqUqXKdbc1btw4paSkXPNo3rx5YX0UAPhL0rLtenTVnNwiP7JBe33U\n",

"6SGKPAAAAP5UoZf54cOH6+zZs0pISFBCQoIiIyM1depUDR8+XJJ07733asqUKZKkrVu36vTp02rX\n",

"rt11t2Wz2RQUFHTNw2q1FtpnAYCbderqZfVePlkrTuyTr5dV/21zn8bd3lVeFia6AwAAwJ9z6Wn2\n",

"w4YN0/Lly5WYmKguXbooMDBQhw8f/sP3vPbaa3rooYdUq1Yt+fr6as6cOfLx8XFlTAAoVFuTEjRk\n",

"1WxdzExTqH9JfdRxkJqWvf4ZSAAAAMD1WAzDMMwOUZDGjBmjiRMnmh0DAK5r/qFteua7L5TtdOi2\n",

"UuX1cadoVSwZYnYsAAAAeBhTZrMHgOLG4XTq1e3f6IM9P03+eVfV2zSpTX8F+PianAwAAACeiDIP\n",

"AC6WmpWpx9d+prhT+yVJTzTqqCcbR3F9PAAAAG4aZR4AXOh46kU9EjtLB5KTZLN6663W96pn9UZm\n",

"xwIAAICHo8wDgIt8n3hUQ1fN0WV7usL8AzWt0yBFhFY2OxYAAACKAMo8ALjAJwe26LnvFyvHcKpR\n",

"mUr6qONDKl8i2OxYAAAAKCIo8wBQgHKcDv3f1q80bd9GSVLPag31Zut+8vdmojsAAAAUHMo8ABSQ\n",

"FHuGRqydq7WnD0qSnmrcWU806iiLxWJyMgAAABQ1lHkAKABHUy7o4biZOpJyXv7ePvpvm/vUPbyB\n",

"2bEAAABQRFHmAeAv2nDmsIat/kQpWRkqHxCs6VGDVL90RbNjAQAAoAijzAPAXzDzx+/1wualchhO\n",

"NQ6trGkdB6lsQKDZsQAAAFDEUeYB4CZkOx361+almrl/kySpT43Ger1lH/l5+5icDAAAAMUBZR4A\n",

"8umyPV3DV3+qDWcPyyKLnmnaRSMbtGOiOwAAABQayjwA5MPh5HOKiZ2phNSLCvD21Ttt+6tL1dvM\n",

"jgUAAIBihjIPAHm05vRBjVjzqa5kZapSyRB93Cla9UqVNzsWAAAAiiHKPAD8CcMwNG3fRr28dbmc\n",

"hqFmZavqw44PqYx/SbOjAQAAoJiizAPAH8hy5Oj5TUv06cEtkqT+tZrq1Rb3yGblxycAAADMw2+j\n",

"AHADlzLTNHT1HG1KPCaLLHq+2V0aelsbJroDAACA6SjzAHAdBy4n6eHYmTpx9ZJK+tj0XrsH1Kly\n",

"XbNjAQAAAJIo8wDwO3En92vk2rm6mm1X1cBSmh4VrdohYWbHAgAAAHJR5gHgZ4Zh6IM96/XKtq9l\n",

"yFBkuWqa2mGgSvmVMDsaAAAAcA3KPABIsjtyNO67LzT/8HZJ0oDazfXvyJ7yZaI7AAAAuCF+SwVQ\n",

"7F3IuKpHV83W1nPH5WWx6MXmPfTIrS2Z6A4AAABuizIPoFjbd+msHo6dqdNpyQry9dPk9gPUrmJt\n",

"s2MBAAAAf4gyD6DYWnF8r/62bp7Sc7JULaiMZkRFq0ZwqNmxAAAAgD9FmQdQ7BiGofd+WKPXtn8r\n",

"Q4Zal6+pyR0G6BZbgNnRAAAAgDyhzAMoVjJzsvX0xoX64mi8JCm6bgv9644e8vGymhsMAAAAyAfK\n",

"PIBiIyn9ioasmq2d50/KavHS/0X21KC6kWbHAgAAAPKNMg+gWPjhwmk9EjdLZ9NTFOzrr6kdHlSr\n",

"CjXNjgUAAADcFMo8gCJvecIPemLdfGU6slUzOFTTo6JVLaiM2bEAAACAm3ZTZT4rK0u+vr4FnQUA\n",

"CpRhGPrvrji9uTNWktSuYm293+4BBdv8TU4GAAAA/DVeeX3hmjVrdP/99ys0NFR+fn7y9fVVkyZN\n",

"9Oqrr+rSpUuuzAgA+ZaRk6URa+bmFvkh9VppZlQ0RR4AAABFQp7KfLdu3fT222+rT58+2rFjh+x2\n",

"uy5evKgpU6YoJydHHTt21DfffOPqrACQJ2fTUtTv66lamrBbPl5Wvd6qj/51x93yZsZ6AAAAFBEW\n",

"wzCMP3vRDz/8oAYNGtxwfXZ2to4dO6batWsXaLibMWbMGE2cONHsGABMcikzTXcve0/HUy/pFluA\n",

"Puw4UJHlqpsdCwAAAChQebpm/npF3jAMXb16VYGBgfLx8XGLIg+geLM7cjQ4bpaOp15SlZKlNLfr\n",

"YFUNLG12LAAAAKDA5fmaeUkaPHiwkpOTlZWVpYiICIWFhen99993VTYAyDPDMPT0xoXaeu64gnz9\n",

"NKtzDEUeAAAARVa+yvz27dsVEhKib775Ro0bN1ZiYqKmTJniqmwAkGeTdq3SoiM7ZbV46YMOD6pm\n",

"SFmzIwEAAAAuk68y/8vl9evXr1ePHj0UFBQkq5UJpQCYa8nRXZqwc6Uk6ZUWvdSmQi2TEwEAAACu\n",

"la8yX65cOQ0fPlyff/65oqKilJ2dLYfD4apsAPCntp87ob9v+FySNPS21hpY5w6TEwEAAACul68y\n",

"/8knn6hOnTr67LPPFBISotOnT2vMmDGuygYAf+hk6iUNjpsluyNHd1a+Vc/d3s3sSAAAAEChyNOt\n",

"6TwJt6YDiofUrEz1Xj5ZB5KTdFup8lrU7TGV8LGZHQsAAAAoFHm6NV21atVksVhuuP7o0aMFFggA\n",

"/kyO06Hhaz7VgeQkhfkHanpUDEUeAAAAxUqeyvyyZcskSZ999pkSEhI0bNgwSdKHH36oqlWrui4d\n",

"AFzHi5uXac3pg/L39tH0qGhVKBFsdiQAAACgUOWpzN92222SpG+++UZbt27NXd6qVSs1b95cL7/8\n",

"smvSAcBvfLxvo2bu/14WWfR22/5qWKaS2ZEAAACAQpevCfBSUlKUlpaW+zwtLU0pKSkFHgoArifu\n",

"5H79a8tPZwqNu72r7qpa3+REAAAAgDnyNDL/iwEDBigyMlL33XefJOnzzz/XwIEDXRIMAH7tx0uJ\n",

"Grl2rpyGof61btfw+m3NjgQAAACYJl9l/l//+peaNWumVatWSZJee+013XXXXS4JBgC/OJeeqpjY\n",

"GbqabVfLctU1vkXvP5yUEwAAACjq8lXmJal79+7q3r17nl47atQoLVmyRMePH9fOnTsVEREhSbrz\n",

"zjuVmJgoLy8vBQYG6u2331bjxo0lSeHh4bLZbPL395ckjRs3Tv37989vTABFREZOtgavmqXTacmq\n",

"HlRGH3QcKF9rvn90AQAAAEVKvn4jTkhI0GuvvaYjR44oJycnd/kvI/W/1a9fP40dO1atW7e+Zvn8\n",

"+fMVEhIiSfriiy8UExOjXbt25a6fN29ebvEHUHw5DafGrP9cO8+fVIgtQDOiYnSLLcDsWAAAAIDp\n",

"8lXm77vvPnXq1EmPP/64rFbrn76+bdvrX9P6S5GXfppU72ZPl7Xb7bLb7dcsczgcN7UtAO7nzZ2x\n",

"WpqwWz5eVn3UcaCqB5cxOxIAAADgFvJV5jMzMzV+/PgC+cKDBg3S6tWrJUlfffXV79YZhqHmzZvr\n",

"P//5j0JDQ6+7jfHjx+ull166ZllkZGSB5ANgrgWHt2vSrp/O+nm9ZR9FlqtuciIAAADAfeTr1nT1\n",

"69fXiRMnCuQLz5o1SydPntS///1vPfPMM7nL161bp927d2vHjh0qU6aMoqOjb7iNcePGKSUl5ZpH\n",

"8+bNCyQfAPNsTjympzcukiQ93rC97q3V1OREAAAAgHvJ18j8+fPn1ahRI7Vo0UJ+fn65yxctWnTT\n",

"AaKjo/XYY4/p4sWLKl26tKpUqSJJ8vHx0ejRo1W7du0bvtdms8lms12zLC+n/wNwX8euXNCQVbOV\n",

"7XSoe3gDjW1yp9mRAAAAALeTrzI/cODAv3xf+eTkZKWnp6tChQqSpMWLF6t06dIqVaqU0tLSlJ2d\n",

"nXtN/dy5c3NnuQdQ9CXb0xUTO1OX7elqVKaS/tvmXnlZ8nUCEQAAAFAs5KvM/9Ep79czbNgwLV++\n",

"XImJierSpYsCAwMVFxene++9VxkZGfLy8lJoaKiWLVsmi8WipKQk9e3bVw6HQ4ZhqHr16po1a1a+\n",

"viYAz5TtdGjY6k90JOW8KpQI1sedBsnf29fsWAAAAIBbyleZf+SRR667/OOPP77u8g8++OC6y7ds\n",

"2XLd5dWrV9fOnTvzEwlAEWAYhp77/kttPHtEJbx9NSMqWmEBQWbHAgAAANxWvsp806b/m4QqMzNT\n",

"CxcuVJMmTQo8FIDiZere9fr04BZ5WSx6v/0A1StVwexIAAAAgFvLV5kfOXLkNc+HDx+unj17Fmgg\n",

"AMXLiuN79e+tX0uSXmjWXZ0q1zU5EQAAAOD+/tLMUn5+fjp16lRBZQFQzPxw4bQeX/eZDBkaVDdS\n",

"g+u1MjsSAAAA4BHyNTI/ZsyY3D87HA5t27ZN9evXL/BQAIq+s2kpiombqYycbLWrUEsv33G3LBaL\n",

"2bEAAAAAj5CvMh8cHPy/N3p7a9SoUerTp0+BhwJQtKVnZ+nh2JlKSr+i2iFlNbnDg/L2spodCwAA\n",

"APAY+SrzL774oqtyACgmnIZTf1v3mfZcOqPSfiU0IypGQb5+ZscCAAAAPEq+rplPTU3VyJEjVbt2\n",

"bdWuXVuPP/64UlNTXZUNQBH06rZvtOLEPtms3prWcZCqBJYyOxIAAADgcfJV5keMGKGcnBzNnz9f\n",

"n3/+uZxOp0aMGOGqbACKmE8PbtGUPeskSRNa9dPtYVVNTgQAAAB4pnydZr97927t2rUr9/n777+v\n",

"Ro0aFXgoAEXPxjOH9Y/vFkuSxkRE6Z4aEabmAQAAADxZvkbmHQ7HNafVX716VQ6Ho8BDAShaDief\n",

"09DVc5RjONW7eoT+HtHJ7EgAAACAR8vXyHx0dLQiIyPVv39/SdL8+fP18MMPuyQYgKLhUmaaomNn\n",

"KiUrU7eXraoJrfpyCzoAAADgL8pXmX/66afVoEEDxcbGSpImTJigrl27uiQYAM9nd+To0VWzdTz1\n",

"oiqXvEUfdXxIft4+ZscCAAAAPF6eynxKSor+/e9/68CBA2ratKleeeUV2Ww2V2cD4MEMw9AzGxdp\n",

"c1KCAn1smtk5RmX8S5odCwAAACgS8nTN/GOPPaajR4/qrrvu0nfffad//OMfrs4FwMO9u3uNFhzZ\n",

"IavFS1M6PKjaIWFmRwIAAACKjDyNzO/evVt79uyRxWJRTEyMWrdu7epcADzYsmO79dqOFZKk/4vs\n",

"qXYVa5ucCAAAACha8jQyb7PZcies8vf3d2kgAJ5t5/mTemL9fEnS4HqtNKhupMmJAAAAgKInTyPz\n",

"p06d0pgxY3Kfnzx58prnEydOLPhkADzO6avJeiRupuyOHHWqVFcvNOtudiQAAACgSMpTmR85cuQf\n",

"PgeA1KxMRcfO0PmMq7r1lnJ6r/0Dsnrl6eQfAAAAAPmUpzL/4osvujoHAA+W43Ro5Nq52n85UWX9\n",

"AzUzKkYlfbjjBQAAAOAqeRo227x58x+uz8jI0L59+wokEADP8/KW5Vp16oD8rD76uNMgVSgZYnYk\n",

"AAAAoEjLU5l/88031blzZ02fPl379u3TxYsXdfr0aa1atUpjx45VixYtlJSU5OqsANzQzB+/18c/\n",

"fidJ+m/b+xQRWtnkRAAAAEDRl6fT7OfPn6+tW7fqgw8+0CuvvKJTp06pRIkSatiwofr27auNGzeq\n",

"RIkSrs4KwM2sOX1QL2xeKkl6tmkX9QhvYHIiAAAAoHjIU5mXpGbNmqlZs2auzALAgxy4nKThqz+R\n",

"w3Dq3ppNNLJBe7MjAQAAAMVGvqaaHjFiRJ6WASjaLmRcVUzsDKVm23VHWDW91rKPLBaL2bEAAACA\n",

"YiNfZX7Tpk2/W/bdd98VWBgA7i8jJ1uPxM3SyauXFR5YWh91HChfa55P8gEAAABQAPL0G/i8efP0\n",

"2Wef6dixY+rTp0/u8pSUFJUsWdJl4QC4F8Mw9NSGBdpx/oSCff01q3OMbvFjvgwAAACgsOWpzNet\n",

"W1e9evXSjh071KtXr9zlQUFB6tSpk8vCAXAvb8bH6stju+Rt8dLUjgNVPTjU7EgAAABAsZSnMt+o\n",

"USM1atRI3bt3V2gov7wDxdGiIzv13/g4SdJ/Wt6jVuVrmJwIAAAAKL7ydaGrj4+PXnvtNR05ckQ5\n",

"OTm5yz/++OMCDwbAfWxNStBTGxZIkobXb6f7a3NnCwAAAMBM+Srz/fr1U2hoqFq0aCGr1eqqTADc\n",

"yPHUixocN1tZToe6VrlN427vYnYkAAAAoNjLV5k/e/asYmNjXZUFgJtJsWcoZuVMXbKnqUHpinq7\n",

"bX95WfJ1EwwAAAAALpCv38pr1Kih5ORkF0UB4E6ynQ4NX/OpDqWcU7mAIE2PilaAj6/ZsQAAAAAo\n",

"jyPzY8aMkSQFBASoSZMm6tq1q/z8/HLXT5w40TXpAJjCMAz9c9MSrTtzSAHevpoRFa1yAUFmxwIA\n",

"AADwszyV+eDg4Nz/3nrrrS4NBMB8H+3boDkHNssii95rd7/ql65odiQAAAAAv5KnMv/iiy+6OgcA\n",

"N7HyxD69vOUrSdI/m3VT5yr1TE4EAAAA4LfyNQHeyy+//LtlISEhatGihZo141ZVgKfbe/GMRq79\n",

"TIYMPVi7uR69rbXZkQAAAABcR74mwPvxxx81efJknTx5UqdOndKUKVO0Zs0aPfjgg3r77bddlRFA\n",

"IUhKv6KY2JlKz8lSmwo19e8WvWSxWMyOBQAAAOA68jUyf/nyZcXHxyssLEySlJSUpIceekibNm1S\n",

"mzZtNGrUKJeEBOBaGTlZeiRuls6mp6hmcKimtH9QPl5Ws2MBAAAAuIF8jcyfOnUqt8hLUlhYmM6c\n",

"OaNSpUrJx8enwMMBcD2n4dSodfO068Ip3WIL0IyoGAXb/M2OBQAAAOAP5KvMV6xYUS+99JJOnjyp\n",

"kydP6uWXX1aFChXkcDg4HRfwUK9t/1ZfH98rXy+rpnUapPCg0mZHAgAAAPAn8lXmZ86cqb179yoi\n",

"IkIRERHas2ePZsyYoezsbM2aNctVGQG4yLxD2/TeD2skSW+07qfmYeFmxgEAAACQR/m6Zr5cuXKa\n",

"P3/+ddc1aNCgQAIBKBzfnT2iZzYukiQ90aij+tZobHIiAAAAAHmVpzK/du1atWvXTkuWLLnu+p49\n",

"exZoKACudTTlvB5dNUc5hlM9qzXUU407mx0JAAAAQD7kqczPmTNH7dq101tvvfW7dRaLhTIPeJDL\n",

"9nRFx85USlaGmoRW0Zut72XOCwAAAMDD5KnMf/jhh5Kk1atXuzQMANfKcuTo0VWzdezKBVUqGaJp\n",

"nR6Svzd3ogAAAAA8Tb4mwMvJydGbb76pESNGSJKOHDmiVatW3fD1o0aNUnh4uCwWi+Lj43OX33nn\n",

"nWrYsKEiIiLUpk0b7dy5M3fdoUOH1LJlS9WuXVvNmjXT3r178/mRAFyPYRga9/0X2pR4TCV9bJoR\n",

"FaNQ/0CzYwEAAAC4Cfkq848//rj279+fO0JfunRpjR079oav79evnzZs2KCqVates3z+/PnavXu3\n",

"4uPjNWbMGMXExOSuGzZsmIYOHaqDBw/qmWeeuWYdgJv3/g9rNe/QdnlZLJrcfoDq3lLO7EgAAAAA\n",

"blK+yvymTZv04Ycfys/PT5IUEhKi7OzsG76+bdu2qlSp0u+Wh4SE5P45JSUl93rdc+fOadu2bRo4\n",

"cKAkqW/fvjp58qQOHz583e3b7XZduXLlmofD4cjPRwKKha8S9mj89m8kSS81v1sdKtUxOREAAACA\n",

"vyJft6b7pcT/wuFwyOl03tQXHjRoUO4I/1dffSVJOnnypMqXLy9v759iWSwWValSRSdOnFDNmjV/\n",

"t43x48frpZdeumZZZGTkTeUBiqpdF05p1Lp5kqSHb22ph+u1NDkRAAAAgL8qXyPzDRs21Jw5c+R0\n",

"OnX48GE99thjat++/U194VmzZunkyZP697//rWeeeeamtjFu3DilpKRc82jevPlNbQsois5cTdbD\n",

"sTOV6chWh4p19GLz7mZHAgAAAFAA8lTmX3zxRa1bt05vvfWW1q9fr8TERLVq1UoWi0X/+c9//lKA\n",

"6OhorV69WhcvXlTlypV19uxZ5eTkSPppwq4TJ06oSpUq132vzWZTUFDQNQ+r1fqX8gBFRVq2XTFx\n",

"M3UuI1V1QsL0fvsH5O3F9wcAAABQFOSpzJ87d05Dhw5V2bJldeTIEY0aNUqLFy/W5MmTVaJEiXx9\n",

"weTkZJ05cyb3+eLFi1W6dGmVKlVKZcuWVZMmTTRnzhxJ0sKFC1WpUqXrnmIP4MYcTqdGrp2rfZfO\n",

"KtS/pGZ2jlGgr9+fvxEAAACAR8jTNfOTJ0+WJJ09e1Zr1qzRmjVrFBMTo7Nnz6pNmzZavnz5dd83\n",

"bNgwLV++XImJierSpYsCAwMVFxene++9VxkZGfLy8lJoaKiWLVuWOwneBx98oJiYGL366qsKCgrS\n",

"9OnTC+ijAsXHv7d9pdiT+2Wzemtap0GqVPIWsyMBAAAAKEAWwzCM/LwhKytL3333nVavXq25c+cq\n",

"LS1Np0+fdlW+fBszZowmTpxodgzANHP2b9az338hSZrcfoDurtbQ5EQAAAAAClqeRubXrVunNWvW\n",

"aPXq1Tp9+rQiIyPVtm1bLV++XLVq1XJ1RgB5tO70IT236UtJ0tONO1PkAQAAgCIqT2W+ffv2ioyM\n",

"1AsvvKCuXbu6OhOAm3AwOUmPrflEDsOpvjUaa1SjjmZHAgAAAOAieZoAb926derWrZsmTJigmjVr\n",

"asCAAZo6daoOHjzo6nwA8uBi5lXFrJypK1mZah4Wrtdb9c2dhwIAAABA0ZOnkfnWrVurdevWev75\n",

"55WVlaXNmzdr9erV6tmzp65evapTp065OieAG8jMydbguNk6cfWSqgaW1kcdH5LNmqdvbQAAAAAe\n",

"Kl+/8Z85c0arV6/WmjVrtGrVKp07d06tW7d2VTYAf8IwDD21caG2nTuuYF8/zYyKVim//N0uEgAA\n",

"AIDnyVOZf/TRR7V27VqdOXNGLVq0UIcOHTRnzhw1a9ZM3t6MAAJm+e+uOC0+Gi9vi5c+6DBQNUPK\n",

"mh0JAAAAQCHIUxOvXLmypk2bpsjISPn4+Lg6E4A8+PLoLr25M1aS9EqL3mpdoabJiQAAAAAUljyV\n",

"+RdeeMHVOQDkw/ZzxzVmw+eSpGG3tdGDdZqbnAgAAABAYcrTbPYA3MeJ1Et6JG6W7I4c3Vn5Vv3j\n",

"9rvMjgQAAACgkFHmAQ9yJStTMbEzdDEzTfVLVdA77e6X1YtvYwAAAKC4oQUAHiLH6dDw1Z/oYPI5\n",

"hQUEaXpUtEr42MyOBQAAAMAElHnAAxiGoRc3L9XaM4fk7+2jGZ2iVb5EsNmxAAAAAJiEMg94gI9/\n",

"/E4z92+SRRa90/Z+NShT0exIAAAAAExEmQfcXNzJ/XppyzJJ0j9u76quVW8zOREAAAAAs1HmATe2\n",

"79JZjVjzqZyGoftr3a7H6rc1OxIAAAAAN0CZB9zUufRUxcTOUFpOllqWq65XW/SWxWIxOxYAAAAA\n",

"N0CZB9xQRk6WHombpTNpKaoeVEZTOw6Ur9Xb7FgAAAAA3ARlHnAzTsOp0es/V/yFkwqxBWhm5xiF\n",

"2ALMjgUAAADAjVDmATfzxo6VWp7wg3y8rPqo40BVCypjdiQAAAAAboYyD7iRzw9t1zu7V0uS3mjV\n",

"R5HlqpucCAAAAIA7oswDbmJT4lGN/W6RJOlvDTuoX82mJicCAAAA4K4o84AbOHblgoasmqNsp0Pd\n",

"wxvo6SadzY4EAAAAwI1R5gGTJdvTFb1yhpLt6WpUppL+2+ZeeVn41gQAAABwYzQGwETZToeGrf5E\n",

"R69cUIUSwZreKVr+3r5mxwIAAADg5ijzgEkMw9C4777QxrNHVMLbVzOiYlQ2INDsWAAAAAA8AGUe\n",

"MMmUPev02aFt8rJY9H77AapXqrzZkQAAAAB4CMo8YIJvju/Vq9u+kSS92LyHOlWua3IiAAAAAJ6E\n",

"Mg8Ush8unNbf1n0mQ4ai60bqkVtbmh0JAAAAgIehzAOF6GxaimLiZiojJ1vtKtbWS3fcLYvFYnYs\n",

"AAAAAB6GMg8UkrRsux6Onamk9CuqHVJWk9sPkLeX1exYAAAAADwQZR4oBA6nU6PWzdOeS2dU2q+E\n",

"ZkTFKMjXz+xYAAAAADwUZR4oBK9u/0YrTuyTzeqtjzsNUpXAUmZHAgAAAODBKPOAi31yYIs+2LNO\n",

"kvRm635qWraqyYkAAAAAeDrKPOBCG84c1nPfL5YkPdk4Sr2rR5iaBwAAAEDRQJkHXORw8jkNXT1H\n",

"OYZT91SP0OhGncyOBAAAAKCIoMwDLnApM03RsTN0JStTt5etqjda9eUWdAAAAAAKDGUeKGB2R46G\n",

"rJqt46mXVKVkKU3r9JD8vH3MjgUAAACgCKHMAwXIMAyN3bhQW5ISFOhj04zO0SrtV9LsWAAAAACK\n",

"GMo8UIDe2b1aC4/slNXipQ86DFTtkDCzIwEAAAAogijzQAFZemy3Xt/xrSTp35E91bZiLZMTAQAA\n",

"ACiqKPNAAdhx/oRGr58vSRpSr5UeqhtpciIAAAAARRllHviLTl29rEdiZ8nuyFFU5br6Z7PuZkcC\n",

"AAAAUMRR5oG/IDUrU9ErZ+hC5lXVK1Ve77V7QFYvvq0AAAAAuBatA7hJOU6HRqyZqwPJSQrzD9SM\n",

"TtEq4WMzOxYAAACAYoAyD9ykl7Ys1+rTB+Rn9dHHUdGqUDLE7EgAAAAAigmXlvlRo0YpPDxcFotF\n",

"8fHxkqTMzEz17t1btWvXVqNGjdS5c2cdPnw49z3t27dXtWrVFBERoYiICL311luujAjclBk/fq/p\n",

"P34nSXq7bX81KlPJ5EQAAAAAihOXlvl+/fppw4YNqlq16jXLhw4dqgMHDmjXrl3q1auXhgwZcs36\n",

"t956S/Hx8YqPj9ff//53V0YE8m31qQN6YfMSSdKzTbuqW3h9kxMBAAAAKG5cWubbtm2rSpWuHbH0\n",

"8/NTt27dZLFYJEmRkZFKSEi4qe3b7XZduXLlmofD4firsYEb2n85UcPXfCqnYah/raYa2aCd2ZEA\n",

"AAAAFEOmXzM/adIk9erV65plzz77rBo0aKD+/fvr6NGjN3zv+PHjFRwcfM1jy5Ytro6MYup8Rqpi\n",

"YmfoarZdkeWqaXyLe3L/UQoAAAAACpOpZf7VV1/V4cOHNX78+Nxls2fP1v79+7V79261adNGPXr0\n",

"uOH7x40bp5SUlGsezZs3L4zoKGYycrL1SNwsnbqarGpBZfRhh4HytXqbHQsAAABAMWVamZ8wYYIW\n",

"LVqkr7/+WgEBAbnLK1euLEmyWCx6/PHHdfToUV28ePG627DZbAoKCrrmYbVaCyU/ig+n4dSTGz7X\n",

"zvMnFezrr5lRMbrFr4TZsQAAAAAUY6aU+YkTJ2ru3LlauXKlQkJCcpfn5OQoKSkp9/nChQsVFham\n",

"0qVLm5AS+MmbO2O15Nhu+XhZ9WHHgaoeXMbsSAAAAACKOZeeJzxs2DAtX75ciYmJ6tKliwIDA7Vm\n",

"zRo9+eSTql69ujp06CDppxH2zZs3y263q3v37rLb7fLy8lKZMmW0ZMkSV0YE/tDCIzs1adcqSdJ/\n",

"Wt6jluVrmJwIAAAAAFxc5j/44IPrLjcM47rLS5QooW3btrkyEpBnW5IS9PSGBZKkEQ3aqX+t201O\n",

"BAAAAAA/MX02e8AdHU+9qCFxs5XldOiuqrfp2aZdzI4EAAAAALko88BvpNgzFL1yhi7Z09SwdEW9\n",

"3ba/vCx8qwAAAABwHzQU4FeynQ4NW/2JDqecV/mAYH0cFS1/b1+zYwEAAADANSjzwM8Mw9Dz33+p\n",

"DWcPK8DbVzOiolUuIMjsWAAAAADwO5R54Gcf7t2gTw5ukUUWvdfuft1WuoLZkQAAAADguijzgKRv\n",

"T+zT/239SpL0QvNu6lylnsmJAAAAAODGKPMo9vZePKPH134mQ4YG1rlDQ+q1NjsSAAAAAPwhyjyK\n",

"tcT0K4qOnaH0nCy1rVBL/xfZUxaLxexYAAAAAPCHKPMottKzs/RI7Ewlpl9RreCymtx+gHy8rGbH\n",

"AgAAAIA/RZlHseQ0nPrbus+0++JplbKV0IzO0Qq2+ZsdCwAAAADyhDKPYmn8thVacWKffL2smtbp\n",

"IVUNLG12JAAAAADIM8o8ip25B7dq8p61kqQJrfupWVi4uYEAAAAAIJ8o8yhWNp49onHffSFJGh3R\n",

"SX1qNDY5EQAAAADkH2UexcbRlPMaumqOcgynelVrpCcjosyOBAAAAAA3hTKPYuFyZpoGrZyhlKwM\n",

"NQmtojdb9+MWdAAAAAA8FmUeRV6WI0ePrp6jhNSLqlQyRNM6PSQ/bx+zYwEAAADATaPMo0gzDEPP\n",

"fLdImxKPqaSPTTOiYhTqH2h2LAAAAAD4SyjzKNLe+2GNPj+8Q14Wiya3H6C6t5QzOxIAAAAA/GWU\n",

"eRRZyxJ+0H+2r5AkvXxHT3WoVMfkRAAAAABQMCjzKJLiz5/UE+vmSZIeubWlYm5tYXIiAAAAACg4\n",

"lHkUOaevJuuRuFmyO3LUsVIdvdi8h9mRAAAAAKBAUeZRpFzNtismdobOZaSq7i3l9H77AbJ68dcc\n",

"AAAAQNFCy0GR4XA6NXLNXP14OVGh/iU1MypGJX1sZscCAAAAgAJHmUeR8X9blyvu1H7ZrN76uFO0\n",

"KpYMMTsSAAAAALgEZR5Fwqz9m/TRvo2SpElt7lPj0MomJwIAAAAA16HMw+OtOX1Q/9y0RJI0tsmd\n",

"6lGtocmJAAAAAMC1KPPwaAcuJ2n46k/kMJzqV6OJ/tawg9mRAAAAAMDlKPPwWBcyriomdoZSs+26\n",

"Iyxcr7XqI4vFYnYsAAAAAHA5yjw8UmZOtgbHzdLJq5dVNbC0Puz4kGxWb7NjAQAAAEChoMzD4xiG\n",

"oSc3LtD28ycU7OunWZ1jVMqvhNmxAAAAAKDQUObhcd6Kj9OXR3fJ2+KlqR0GqkZwqNmRAAAAAKBQ\n",

"UebhURYfjdfE+FhJ0qste6tVhZomJwIAAACAwkeZh8fYlnRcT25YIEkaVr+tBtRubnIiAAAAADAH\n",

"ZR4e4UTqJQ1eNUt2R466VKmnfzTtanYkAAAAADANZR5u70pWpmJiZ+hiZprql6qgd9reL6sXf3UB\n",

"AAAAFF80Iri1HKdDw1d/ooPJ5xQWEKTpUdEK8PE1OxYAAAAAmIoyD7dlGIZe2LxUa88ckr+3j2Z0\n",

"ilb5EsFmxwIAAAAA01Hm4bam7duoWfs3ySKL3m17vxqUqWh2JAAAAABwC5R5uKW4k/v18tblkqTn\n",

"br9LXareZnIiAAAAAHAflHm4nX2XzmjEmk/lNAw9ULuZhtVvY3YkAAAAAHArlHm4laT0K4peOVNp\n",

"OVlqVb6GXm3RWxaLxexYAAAAAOBWKPNwGxk5WXokbpbOpqeoRnCoPujwoHy8rGbHAgAAAAC3Q5mH\n",

"W3AaTj2xbr52XTilW2wBmhEVrRBbgNmxAAAAAMAtUebhFl7f8a2+Or5HPl5WfdTxIVULKmN2JAAA\n",

"AABwW5R5mG7+oW16d/caSdIbrfrojnLVzA0EAAAAAG7OpWV+1KhRCg8Pl8ViUXx8vCQpMzNTvXv3\n",

"Vu3atdWoUSN17txZhw8fzn3PuXPn1LVrV9WqVUv169fXunXrXBkRJvs+8aie+e4LSdKohh3Ur2ZT\n",

"kxMBAAAAgPtzaZnv16+fNmzYoKpVq16zfOjQoTpw4IB27dqlXr16aciQIbnrnn32WUVGRurQoUOa\n",

"Pn26BgwYoOzsbFfGhEmOplzQo6vmKNvpUI/wBnqqSWezIwEAAACAR3BpmW/btq0qVap0zTI/Pz91\n",

"69Yt93ZjkZGRSkhIyF0/f/58PfbYY5KkZs2aqUKFClq7du11t2+323XlypVrHg6HwzUfBgXqsj1d\n",

"MbEzlGxPV0SZynqrzX3ysnDVBwAAAADkhentadKkSerVq5ck6eLFi8rOzla5cuVy14eHh+vEiRPX\n",

"fe/48eMVHBx8zWPLli2Fkhs3L8uRo6Gr5ujolQuqWCJEH3caJH9vH7NjAQAAAIDHMLXMv/rqqzp8\n",

"+LDGjx9/U+8fN26cUlJSrnk0b968gFOiIBmGoXHfL9b3iUdVwttX06OiVTYg0OxYAAAAAOBRvM36\n",

"whMmTNCiRYsUGxurgICf7ideunRpeXt7KzExMXd0PiEhQVWqVLnuNmw2m2w22zXLrFara4PjL5m8\n",

"Z53mHdomL4tF77cfoHqlypsdCQAAAAA8jikj8xMnTtTcuXO1cuVKhYSEXLPu3nvv1ZQpUyRJW7du\n",

"1enTp9WuXTsTUqKgfX18j8Zv+0aS9K/mPdSpcl2TEwEAAACAZ3LpyPywYcO0fPlyJSYmqkuXLgoM\n",

"DNSaNWv05JNPqnr16urQoYOkn0bYN2/eLEl67bXX9NBDD6lWrVry9fXVnDlz5OPD9dSebveFU/rb\n",

"2nkyZCi6bgs9Uq+V2ZEAAAAAwGO5tMx/8MEH111uGMYN3xMWFqZvv/3WVZFggjNpKXo4dqYyHdlq\n",

"X7G2Xrqjh9mRAAAAAMCjmT6bPYq2tGy7Ho6doaSMVNUJCdP77QfI24t5DQAAAADgr6DMw2UcTqf+\n",

"tvYz7b10VmX8SmpGVLSCfP3MjgUAAAAAHo8yD5d5ZdtX+vbkj7JZvTWt00OqHFjK7EgAAAAAUCRQ\n",

"5uEScw5s1tS9GyRJE1vfq6Zlq5qcCAAAAACKDso8Ctz6M4f03PdfSpKeatxZvao3MjkRAAAAABQt\n",

"lHkUqEPJ5zRs9SdyGE71qdFYTzTqaHYkAAAAAChyKPMoMJcy0xQTO0NXsjLVrGxVvdGqrywWi9mx\n",

"AAAAAKDIocyjQNgdORqyaraOp15S1cBS+qjTQ7JZvc2OBQAAAABFEmUef5lhGHp640JtSUpQkK+f\n",

"ZkTFqLRfSbNjAQAAAECRRZnHXzZp1yotOrJTVouXPujwoGqFlDU7EgAAAAAUaZR5/CVLju7ShJ0r\n",

"JUmvRPZSmwq1TE4EAAAAAEUfZR43bfu5E/r7hs8lSY/e1loD695hciIAAAAAKB4o87gpJ1MvaXDc\n",

"LNkdOepc+VY9f3s3syMBAAAAQLFBmUe+pWZlKiZ2pi5kXtVtpcrr3Xb3y+rFXyUAAAAAKCw0MORL\n",

"jtOh4Ws+1YHkJIX5B2p6VIxK+NjMjgUAAAAAxQplHvnyry3LtOb0QflZfTQ9KloVSgSbHQkAAAAA\n",

"ih3KPPLs430bNePH7yVJb7ftr4ZlKpmcCAAAAACKJ8o88iTu5H79a8sySdK4pl3VLby+yYkAAAAA\n",

"oPiizONP/XgpUSPXzpXTMNS/1u0a0aCd2ZEAAAAAoFijzOMPnUtPVUzsDF3NtqtFueoa36K3LBaL\n",

"2bEAAAAAoFijzOOGMnKyNXjVLJ1OS1a1oDKa2nGgfK3eZscCAAAAgGKPMo/rchpOjVn/uXaeP6kQ\n",

"W4BmRsXoFluA2bEAAAAAAKLM4wbe3BmrpQm75eNl1YcdB6p6cBmzIwEAAAAAfkaZx+8sOLxDk3at\n",

"kiS91vIetShX3eREAAAAAIBfo8zjGpsTj2nsxoWSpJEN2uu+WrebnAgAAAAA8FuUeeQ6duWChqya\n",

"rSynQ92q1tczTe80OxIAAAAA4Doo85AkJdvTFRM7U5ft6WpUppImtb1PXhb+egAAAACAO6KtQdlO\n",

"h4at/kRHUs6rfECwPu40SP7evmbHAgAAAADcAGW+mDMMQ899/6U2nj2iEt6+mtk5WmEBQWbHAgAA\n",

"AAD8Acp8MTd173p9enCLvCwWvdf+AdUrVcHsSAAAAACAP0GZL8ZWHN+rf2/9WpL0QrPuiqp8q8mJ\n",

"AAAAAAB5QZkvpvZcPK3H130mQ4YeqnOHBtdrZXYkAAAAAEAeUeaLobNpKYqJnamMnGy1rVBLL0f2\n",

"lMViMTsWAAAAACCPKPPFTHp2lh6OnanE9CuqFVxWk9sPkI+X1exYAAAAAIB8oMwXI07Dqb+t+0x7\n",

"Lp1RKVsJzegcrWCbv9mxAAAAAAD5RJkvRl7d9o1WnNgnXy+rpnV6SFUDS5sdCQAAAABwEyjzxcSn\n",

"B7doyp51kqQ3W9+rZmHh5gYCAAAAANw0ynwxsPHMYf3ju8WSpL9HdNI9NSJMzQMAAAAA+Gso80Xc\n",

"kZTzGrp6jnIMp3pVb6QxEVFmRwIAAAAA/EWU+SLsUmaaBq2coZSsTDUNraI3W/XjFnQAAAAAUARQ\n",

"5osouyNHj66areOpF1W55C2a1mmQ/Lx9zI4FAAAAACgAlPkiyDAMPbNxkTYnJSjQx6YZUTEq41/S\n",

"7FgAAAAAgAJCmS+C3t29RguO7JDV4qXJHR5UnVvCzI4EAAAAAChAlPkiZtmx3XptxwpJ0v9F9lT7\n",

"irVNTgQAAAAAKGiU+SJk5/mTemL9fEnS4HqtNKhupMmJAAAAAACu4NIyP2rUKIWHh8tisSg+Pv5P\n",

"l0tSeHi46tSpo4iICEVERGjevHmujFhknL6arEfiZsruyFGnSnX1QrPuZkcCAAAAALiIS8t8v379\n",

"tGHDBlWtWjVPy38xb948xcfHKz4+Xv3793dlxCLharZd0bEzdD7jqm69pZzea/+ArF6cdAEAAAAA\n",

"RZW3Kzfetm3bfC3PL7vdLrvdfs0yh8NRINv2FDlOh0as+VT7Lycq1L+kZkTFqKSPzexYAAAAAAAX\n",

"csvh20GDBqlBgwYaPHiwzp8/f8PXjR8/XsHBwdc8tmzZUohJzffyluVadeqAbFZvfdwpWhVLhpgd\n",

"CQAAAADgYm5X5tetW6fdu3drx44dKlOmjKKjo2/42nHjxiklJeWaR/PmzQsxrblm/vi9Pv7xO0nS\n",

"pLb91Ti0ssmJAAAAAACFwaWn2d+MKlWqSJJ8fHw0evRo1a5941ur2Ww22WzXnlJutVpdms9drDl9\n",

"UC9sXipJeqZJF/UIb2ByIgAAAABAYXGrkfm0tDQlJyfnPp87d64aN25sXiA3deBykoav/kQOw6l7\n",

"azbR4w3bmx0JAAAAAFCIXFrmhw0bpkqVKunUqVPq0qWLatas+YfLk5KS1KFDBzVs2FANGjTQ2rVr\n",

"NWvWLFdG9DgXMq4qJnaGUrPtuiOsml5r2UcWi8XsWAAAAACAQmQxDMMwO0RBGjNmjCZOnGh2DJfI\n",

"zMlW/28+1PbzJxQeWFpLe4zQLX4lzI4FAAAAAChkbnWaPW7MMAw9uXGBtp8/oWBfP83sHEORBwAA\n",

"AIBiijLvISbGx+rLo7vkbfHS1I4PqUZwqNmRAAAAAAAmocx7gEVHduqt+DhJ0viW96hV+RomJwIA\n",

"AAAAmIky7+a2JiXoqQ0LJEmP1W+rB2o3MzkRAAAAAMBslHk3djz1ogbHzVaW06EuVerpH7d3NTsS\n",

"AAAAAMANUObdVIo9QzErZ+qSPU0NSlfUO23vl5eF3QUAAAAAoMy7pWynQ8PXfKpDKedULiBI06Oi\n",

"FeDja3YsAAAAAICboMy7GcMw9MKmJVp35pD8vX00Iypa5QKCzI4FAAAAAHAjlHk3M23fRs0+sFkW\n",

"WfReuwdUv3RFsyMBAAAAANwMZd6NrDyxTy9tWS5Jer7ZXbqzSj2TEwEAAAAA3BFl3k3svXhGI9d+\n",

"JkOGBtRurqG3tTE7EgAAAADATVHm3UBS+hXFxM5Uek6WWpevqVda9JLFYjE7FgAAAADATVHmTZaR\n",

"k6VH4mbpbHqKagSHakqHAfLxspodCwAAAADgxijzJnIaTo1aN0+7LpzSLbYAzYyKUYgtwOxYAAAA\n",

"AAA3R5k30Wvbv9XXx/fK18uqaZ0GKTyotNmRAAAAAAAegDJvknmHtum9H9ZIkt5o3U/Nw8LNjAMA\n",

"AAAA8CCUeRM4Dac+O7hVkvREo47qW6OxyYkAAAAAAJ7E2+wAxZGXxUufdhmsTw9u1cO3tjA7DgAA\n",

"AADAw1DmTeLv7avB9VqZHQMAAAAA4IE4zR4AAAAAAA9DmQcAAAAAwMNQ5gEAAAAA8DCUeQAAAAAA\n",

"PAxlHgAAAAAAD0OZBwAAAADAw1DmAQAAAADwMJR5AAAAAAA8DGUeAAAAAAAPQ5kHAAAAAMDDUOYB\n",

"AAAAAPAwlHkAAAAAADwMZR4AAAAAAA9DmQcAAAAAwMNQ5gEAAAAA8DCUeQAAAAAAPAxlHgAAAAAA\n",

"D0OZBwAAAADAw1DmAQAAAADwMBbDMAyzQxSkPn36KDw83OwYf8rhcGjLli1q3ry5rFar2XHwJ9hf\n",

"noX95VnYX56F/eVZ2F+ehf3lWdhfnsXT9lfVqlX1xBNP/OFrilyZ9xRXrlxRcHCwUlJSFBQUZHYc\n",

"/An2l2dhf3kW9pdnYX95FvaXZ2F/eRb2l2cpivuL0+wBAAAAAPAwlHkAAAAAADwMZR4AAAAAAA9D\n",

"mTeJzWbTiy++KJvNZnYU5AH7y7OwvzwL+8uzsL88C/vLs7C/PAv7y7MUxf3FBHgAAAAAAHgYRuYB\n",

"AAAAAPAwlHkAAAAAADwMZR4AAAAAAA9DmXexUaNGKTw8XBaLRfHx8Td83bRp01SrVi3VqFFDjz76\n",

"qLKzswsvJHLlZX+tWbNG/v7+ioiIyH1kZGQUblAoMzNTvXv3Vu3atdWoUSN17txZhw8fvu5rly1b\n",

"prp166pWrVrq06ePrly5Ushpkdf9lZCQIKvVes3315EjR0xIjDvvvFMNGzZURESE2rRpo507d173\n",

"dRy/3ENe9hfHL/cyffp0WSwWLV68+LrrOXa5lz/aXxy73Et4eLjq1KmTuy/mzZt33dcVieOXAZda\n",

"u3atcfLkSaNq1arGzp07r/uao0ePGuXLlzfOnj1rOJ1O4+677zbefffdwg0KwzDytr9Wr15tNGrU\n",

"qFBz4fcyMjKM5cuXG06n0zAMw3jnnXeMdu3a/e51qampRtmyZY0ff/zRMAzDGDlypPHUU08VZlQY\n",

"ed9fx44dM4KDgws3HK7r8uXLuX9etGiR0bBhw9+9huOX+8jL/uL45T6OHTtmtGjRwoiMjDS++OKL\n",

"363n2OVe/mx/cexyL3/0e/wvisrxi5F5F2vbtq0qVar0h69ZsGCBevbsqXLlysliseixxx7T3Llz\n",

"Cykhfi0v+wvuwc/PT926dZPFYpEkRUZGKiEh4Xev+/rrr9W4cWPVrVtXkjRixAi+v0yQ1/0F9xES\n",

"EpL755SUlNx992scv9xHXvYX3IPT6dSQIUP0zjvv3PAWWRy73Ede9hc8T1E5fnmbHQDSiRMnVLVq\n",

"1dzn4eHhOnHihImJ8GeOHDmiJk2ayGq16uGHH9aIESPMjlTsTZo0Sb169frd8ut9f509e1Y5OTny\n",

"9uZHoFlutL8kKS0tTc2aNZPD4VDv3r313HPPyWq1FnJCSNKgQYO0evVqSdJXX331u/Ucv9zLn+0v\n",

"ieOXO5g4caJatWqlpk2b3vA1HLvcR172l8Sxy90MGjRIhmGoefPm+s9//qPQ0NBr1heV4xc/DYB8\n",

"atKkiU6dOqXg4GCdOnVK3bp1U5kyZXTfffeZHa3YevXVV3X48GHFxcWZHQV58Ef7q3z58jp9+rTK\n",

"li2rS5cuqX///nrzzTc1duxYE5Ji1qxZkqSZM2fqmWeeuWFBhHv4s/3F8ct8e/bs0cKFC7Vu3Tqz\n",

"oyAP8rq/OHa5l3Xr1qlKlSrKzs7W888/r+jo6CJ7/OI0ezdQpUoVHT9+PPd5QkKCqlSpYmIi/JGg\n",

"oCAFBwdLkipVqqQHHnhA69evNzlV8TVhwgQtWrRIX3/9tQICAn63/nrfX+XLl2dkwyR/tr9sNpvK\n",

"li0rSSpVqpQeeeQRvr/cQHR0tFavXq2LFy9es5zjl3u60f7i+GW+9evXKyEhQbVq1VJ4eLg2bdqk\n",

"oUOHavLkyde8jmOXe8jr/uLY5V5+OQ75+Pho9OjR190XReX4RZl3A3379tWSJUuUmJgowzA0ZcoU\n",

"3X///WbHwg2cPXtWTqdTkpSamqply5apcePGJqcqniZOnKi5c+dq5cqV11wv+mtdu3bVjh07tH//\n",

"fknS+++/z/eXSfKyv86dO5c7m6zdbteiRYv4/jJBcnKyzpw5k/t88eLFKl26tEqVKnXN6zh+uYe8\n",

"7i+OX+YbPny4zp49q4SEBCUkJCgyMlJTp07V8OHDr3kdxy73kNf9xbHLfaSlpSk5OTn3+dy5c6+7\n",

"L4rK8Ysy72LDhg1TpUqVdOrUKXXp0kU1a9aUJA0ZMkRLliyRJFWvXl0vvfSSWrVqpZo1ayo0NFTD\n",

"hg0zM3axlZf9tXDhQjVo0ECNGjVSZGSkOnfurIcfftjM2MXSqVOn9OSTTyo5OVkdOnRQRESE7rjj\n",

"DknSCy+8oClTpkiSAgMD9dFHH6l3796qWbOmTp06pX/+859mRi+W8rq/NmzYoMaNG6tRo0Zq0qSJ\n",

"ypUrp+eee87M6MVSSkqKevfunfuz7t1339WyZctksVg4frmhvO4vjl/ujWOXZ+HY5Z6SkpLUoUMH\n",

"NWzYUA0aNNDatWtzL0Eqiscvi2EYhtkhAAAAAABA3jEyDwAAAACAh6HMAwAAAADgYSjzAAAAAAB4\n",

"GMo8AADFVHh4uOLj4/P1nqeeekr/+te/XJIHAADkHWUeAAAAAAAPQ5kHAKCYa9++vZ566im1adNG\n",

"NWrU0GOPPZa77uzZs+rSpYvq1aunqKgonTp1Kndddna2nn32WTVv3lwRERG67777dPnyZZ0/f17h\n",

"4eHatGmTJGnBggVq1KiRMjIyCv2zAQBQVFHmAQCAjhw5otWrV2vPnj1asWKFvv/+e0nSqFGj1Lx5\n",

"c+3bt08zZ85UXFxc7nveeOMNlShRQlu2bFF8fLwaNGig559/XqGhoZo9e7YefPBBbdmyRaNHj9bn\n",

"n38uf39/sz4eAABFjrfZAQAAgPn69+8vb29veXt7KyIiQkeOHFGLFi0UFxenCRMmSJIqVqyonj17\n",

"5r5n8eLFSklJ0cKFCyVJWVlZCg8PlyS1adNGgwcPVsuWLTVr1izVrl270D8TAABFGWUeAADIz88v\n",

"989Wq1U5OTnXfZ3FYsn9s2EYeuedd3TnnXde97U7d+5UaGioTp48WbBhAQAAp9kDAIAbi4qK0scf\n",

"fyzpp+vnlyxZkruud+/eeuutt5Seni5JSk9P1969eyVJ7777ri5fvqxdu3bpgw8+0MaNGws/PAAA\n",

"RRgj8wAA4IYmTZqkmJgY1atXTxUrVlTHjh1z1z3zzDOy2+264447ckfsf1k2YcIEbd68WWXLltWc\n",

"OXM0cOBAbd26VaVLlzbrowAAUKRYDMMwzA4BAAAAAADyjtPsAQAAAADwMJR5AAAAAAA8DGUeAAAA\n",

"AAAPQ5kHAAAAAMDDUOYBAAAAAPAwlHkAAAAAADwMZR4AAAAAAA9DmQcAAAAAwMNQ5gEAAAAA8DCU\n",

"eQAAAAAAPMz/AzR/6EWw/a8IAAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-87a1e79b-4317-43e8-ab19-a3c4a32a7a85\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-87a1e79b-4317-43e8-ab19-a3c4a32a7a85\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"import seaborn as sns\n",

"def \_plot\_series(series, series\_name, series\_index=0):\n",

" palette = list(sns.palettes.mpl\_palette('Dark2'))\n",

" counted = (series['Index']\n",

" .value\_counts()\n",

" .reset\_index(name='counts')\n",

" .rename({'index': 'Index'}, axis=1)\n",

" .sort\_values('Index', ascending=True))\n",

" xs = counted['Index']\n",

" ys = counted['counts']\n",

" plt.plot(xs, ys, label=series\_name, color=palette[series\_index % len(palette)])\n",

"\n",

"fig, ax = plt.subplots(figsize=(10, 5.2), layout='constrained')\n",

"df\_sorted = \_df\_7.sort\_values('Index', ascending=True)\n",

"\_plot\_series(df\_sorted, '')\n",

"sns.despine(fig=fig, ax=ax)\n",

"plt.xlabel('Index')\n",

"\_ = plt.ylabel('count()')"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-27a4277b-e57a-41c6-a05f-164aeedf2fcf\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAkoElEQVR4nO3de5DV9X3/8dcCul4ql0QQm82y5aZBEfBCVBLR1AS0kaBYtY01\n",

"GFFMzGikFsMoraZTta3BUJwUbanjZUqaAnEYk0ynNdagxKIFbCPaCGFdVhE1RTCKCOz5/ZHJ/roF\n",

"ZDfd5ewHH4+Z7wznfD979n3mM8vXp+fsoaZSqVQCAAAAFKNHtQcAAAAAOkbMAwAAQGHEPAAAABRG\n",

"zAMAAEBhxDwAAAAURswDAABAYcQ8AAAAFEbMAwAAQGEO+JifO3dutUcAAACATnXAx/xLL71U7REA\n",

"AACgUx3wMQ8AAAAHGjEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAA\n",

"hRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAA\n",

"AFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEP\n",

"AAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR\n",

"8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQ\n",

"GDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAA\n",

"AIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMA\n",

"AABQmC6N+WuvvTYNDQ2pqanJ6tWr97puwYIFGTZsWIYMGZIrr7wyO3bsaHO+UqnkU5/6VPr27duV\n",

"4wIAAEARujTmL7zwwjzxxBMZNGjQXtesX78+s2fPzrJly7J27dps2rQp9957b5s1d911V4YMGdKV\n",

"owIAAEAxujTmzzjjjNTV1b3vmkWLFmXSpEkZOHBgampqcvXVV2fhwoWt55977rk8/PDD+drXvrbP\n",

"77d9+/Zs3bq1zbFr167/8/MAAACA7qTqvzPf1NTU5pX7hoaGNDU1JUl27NiRK6+8Mvfcc0969uy5\n",

"z8e6/fbb06dPnzbHihUrumx2AAAAqIaqx/z7ufXWW3PBBRfkYx/7WLvWz5o1K1u2bGlzjB07toun\n",

"BAAAgP2rV7UHqK+vz7p161pvNzY2pr6+Pkny+OOPp6mpKXfffXd27tyZrVu3pqGhIU8//XT69++/\n",

"22PV1tamtra2zX3teUUfAAAASlL1V+anTJmSpUuX5tVXX02lUsn8+fNzySWXJEmWLVuWl156KY2N\n",

"jXniiSfSu3fvNDY27jHkAQAA4IOiS2N++vTpqaurS3NzcyZMmJChQ4cmSaZNm5alS5cmSQYPHpxb\n",

"b70148aNy9ChQ9O/f/9Mnz69K8cCAACAotVUKpVKtYfoSjNmzMicOXOqPQYAAAB0mqq/zR4AAADo\n",

"GDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAA\n",

"AIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMA\n",

"AABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgx\n",

"DwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACF\n",

"EfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAA\n",

"UBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8A\n",

"AACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHz\n",

"AAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAY\n",

"MQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACF6dKYv/baa9PQ0JCa\n",

"mpqsXr16r+sWLFiQYcOGZciQIbnyyiuzY8eOJMkPf/jDjB07NiNGjMhxxx2XmTNnpqWlpStHBgAA\n",

"gG6vS2P+wgsvzBNPPJFBgwbtdc369esze/bsLFu2LGvXrs2mTZty7733Jkn69euXb3/721mzZk3+\n",

"/d//PcuXL88DDzzQlSMDAABAt9elMX/GGWekrq7ufdcsWrQokyZNysCBA1NTU5Orr746CxcuTJKM\n",

"GTMmgwcPTpIccsghGT16dBobG/f6WNu3b8/WrVvbHLt27eq05wMAAADdQdV/Z76pqanNK/cNDQ1p\n",

"amrabd2rr76aRYsW5bOf/exeH+v2229Pnz592hwrVqzokrkBAACgWqoe8+2xdevWnHfeeZk5c2ZO\n",

"Pvnkva6bNWtWtmzZ0uYYO3bsfpwUAAAAul6vag9QX1+fdevWtd5ubGxMfX196+233norEydOzOc+\n",

"97nMmDHjfR+rtrY2tbW1be7r2bNn5w4MAAAAVVb1V+anTJmSpUuX5tVXX02lUsn8+fNzySWXJEl+\n",

"8YtfZOLEiZk4cWJuvvnmKk8KAAAA3UOXxvz06dNTV1eX5ubmTJgwIUOHDk2STJs2LUuXLk2SDB48\n",

"OLfeemvGjRuXoUOHpn///pk+fXqSZO7cuVmxYkWWLFmS0aNHZ/To0fmzP/uzrhwZAAAAur2aSqVS\n",

"qfYQXWnGjBmZM2dOtccAAACATlP1t9kDAAAAHSPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YB\n",

"AACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBi\n",

"HgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAK\n",

"I+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAA\n",

"oDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4A\n",

"AAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPm\n",

"AQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAw\n",

"Yh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwvX6dL1qzZk2am5tz6KGHZuTI\n",

"kenbt28njwUAAADsTbtj/q233sqdd96Zv/mbv8lhhx2Wo446Ku+++27WrVuXsWPH5sYbb8xv//Zv\n",

"d+WsAAAAQDoQ82eddVYuu+yyrFq1KkcddVTr/S0tLVm2bFnmz5+ftWvXZvr06V0yKAAAAPBL7Y75\n",

"J598MrW1tbvd36NHj4wfPz7jx4/P9u3bO3U4AAAAYHft/gC8PYX8r7MGAAAA+L9pd8x/9rOfzfLl\n",

"y/d47s0338w3vvGN3HPPPZ02GAAAALBn7X6b/W233ZZZs2ZlzZo1OeWUU1o/AO+FF17Iyy+/nGuu\n",

"uSZf/OIXu3JWAAAAIB2I+RNOOCHf+973smHDhjz++ONpbm7OYYcdls9//vP5xCc+kV69fq1/5Q4A\n",

"AADooA4X+ObNm3PppZe2ue8//uM/csIJJ3TaUAAAAMDetft35n9l6tSp7boPAAAA6BrtfmX+tdde\n",

"y6uvvppt27blP//zP1OpVJIkW7Zsydtvv91lAwIAAABttTvmFy5cmG9+85t55ZVXMmnSpNb7+/Tp\n",

"k5kzZ3bJcAAAAMDu2h3z1113Xa677rr86Z/+aWbPnt2VMwEAAADvo8MfgDd79uy0tLTk1Vdfzc6d\n",

"O1vvr6+v79TBAAAAgD3r8Afg3X///enbt29GjhyZk046KSeddFJOPvnkPa699tpr09DQkJqamqxe\n",

"vXqvj7lgwYIMGzYsQ4YMyZVXXpkdO3a06xwAAAB8EHU45r/+9a/n6aefzs9//vO8/vrref311/Pa\n",

"a6/tce2FF16YJ554IoMGDdrr461fvz6zZ8/OsmXLsnbt2mzatCn33nvvPs8BAADAB1WH32Z/5JFH\n",

"5phjjmnX2jPOOGOfaxYtWpRJkyZl4MCBSZKrr746t912W6655pr3PXcgqVQq2bbTOw4AAAC60qG9\n",

"DkpNTU21x+gUHY75yZMn55vf/GZ+//d/P4ccckjr/b179/61Bmhqamrzyn1DQ0Oampr2eW5Ptm/f\n",

"nu3bt7e5b9euXb/WXPvTtp07MvyhP672GAAAAAe0n1769Rx20MHVHqNTdPht9jfddFNmzJiRgQMH\n",

"pl+/funbt2/69evXFbN12O23354+ffq0OVasWFHtsQAAAKBTdfiV+ZaWlk4doL6+PuvWrWu93djY\n",

"2PrJ+O93bk9mzZqVGTNmtLmvhH9G79BeB+Wnl3692mMAAAAc0A7tdVC1R+g0HY75zjZlypR84hOf\n",

"yC233JKjjjoq8+fPzyWXXLLPc3tSW1ub2traNvf17NmzS+fvDDU1NQfMWz0AAADoeh1+m32PHj3S\n",

"s2fP3Y49mT59eurq6tLc3JwJEyZk6NChSZJp06Zl6dKlSZLBgwfn1ltvzbhx4zJ06ND0798/06dP\n",

"3+c5AAAA+KCqqVQqlY58wdtvv936523btuWBBx7Irl278kd/9EedPlxnmDFjRubMmVPtMQAAAKDT\n",

"dPiV+cMPP7z1OPLIIzNjxowsWrSoK2YDAAAA9qDDMf+/vfDCC3njjTc6YxYAAACgHTr8AXj9+vVL\n",

"TU1NkmTnzp1Jknnz5nXuVAAAAMBedTjmV69e/f+/uFevDBw4sIhPjAcAAIADRYdjftCgQXnnnXda\n",

"o75fv3457LDDOnsuAAAAYC86HPPLly/PlClTMnDgwCTJpk2bsnjx4px22mmdPhwAAACwuw7H/K8+\n",

"vX7cuHFJfhn3119/fZ566qlOHw4AAADYXYc/zX7btm2tIZ8kp59+et59991OHQoAAADYuw7H/G/8\n",

"xm/kX/7lX1pvP/roozn88MM7dSgAAABg7zr8Nvu/+qu/ygUXXND6CfYtLS1ZsmRJpw8GAAAA7FmH\n",

"Y/6VV17JM888k02bNiVJjjrqqKxYsaLTBwMAAAD2rMNvs589e3b69++f448/Pscff3yOPPLIzJ49\n",

"uytmAwAAAPagwzH/v9XU1GTXrl2dMQsAAADQDh2O+SOOOCLLly9vvf3kk0/miCOO6NShAAAAgL3r\n",

"8O/M/8Vf/EXOP//8HHvssUmSF198Md/97nc7fTAAAABgzzoc86eddlqef/75/PjHP07yy39nvm/f\n",

"vp09FwAAALAXHY75JOnXr1/OPffczp4FAAAAaIf/8wfgAQAAAPuXmAcAAIDCiHkAAAAojJgHAACA\n",

"woh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAA\n",

"ACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgH\n",

"AACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKI\n",

"eQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAo\n",

"jJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAA\n",

"gMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkA\n",

"AAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCdGnMv/jiizn99NMzfPjwnHLKKXnu\n",

"ued2W9PS0pIbbrghxx9/fI499thcccUVee+991rP//mf/3lGjBiR0aNH59RTT82KFSu6cmQAAADo\n",

"9ro05qdPn56rrroqP/3pT3PjjTdm6tSpu61ZsGBBVq5cmZUrV+b5559Pjx49Mnfu3CTJ6tWr861v\n",

"fSsrVqzI6tWr85WvfCVf+cpXunJkAAAA6Pa6LOZfe+21PPPMM7n00kuTJFOmTMmGDRuydu3aNuue\n",

"ffbZnH322Tn44INTU1OTc845Jw8++GCSpKamJjt27Mjbb7+dJHnzzTdTV1e31++5ffv2bN26tc2x\n",

"a9euLnqGAAAAUB1dFvMbNmzI0UcfnV69eiX5ZZjX19enqampzbqTTjopS5cuzdatW7Njx4585zvf\n",

"SWNjY5Jk1KhRuf766/Nbv/Vbqaury1133ZV58+bt9Xvefvvt6dOnT5vD2/IBAAA40FT9A/CmTp2a\n",

"iRMnZvz48Rk/fnyGDx/e+j8A1q9fnyVLlmTt2rVpbm7O9ddfn4svvnivjzVr1qxs2bKlzTF27Nj9\n",

"9VQAAABgv+iymP/oRz+ajRs3ZufOnUmSSqWSpqam1NfXt1lXU1OTW265JatWrcry5cszYsSIHHfc\n",

"cUmSxYsXZ+TIkfnN3/zNJMnll1+eJ598ss0H5P1PtbW16d27d5ujZ8+eXfUUAQAAoCq6LOYHDBiQ\n",

"E088MQ899FCSX4Z5XV1dhg4d2mbdu+++m82bNydJ3njjjdxxxx2ZOXNmkmTw4MF58skn84tf/CJJ\n",

"8sgjj2T48OE5+OCDu2psAAAA6PZ6deWD33PPPZk6dWpuu+229O7dO/fdd1+SZNq0aZk0aVImTZqU\n",

"LVu25Mwzz0yPHj3S0tKS6667Luedd16S5Pzzz8/TTz+dk08+ObW1tTn88MPz93//9105MgAAAHR7\n",

"NZVKpVLtIbrSjBkzMmfOnGqPAQAAAJ2m6h+ABwAAAHSMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAA\n",

"KIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcA\n",

"AIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5\n",

"AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiM\n",

"mAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACA\n",

"woh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAA\n",

"ACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgH\n",

"AACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKI\n",

"eQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAo\n",

"jJgHAACAwoh5AAAAKIyYBwAAgMJ0acy/+OKLOf300zN8+PCccsopee6553Zb09LSkhtuuCHHH398\n",

"jj322FxxxRV57733Ws83NTXlvPPOyzHHHJMRI0Zk3rx5XTkyAAAAdHtdGvPTp0/PVVddlZ/+9Ke5\n",

"8cYbM3Xq1N3WLFiwICtXrszKlSvz/PPPp0ePHpk7d26SpFKp5Pzzz89ll12W//qv/8qaNWty0UUX\n",

"deXIAAAA0O11Wcy/9tpreeaZZ3LppZcmSaZMmZINGzZk7dq1bdY9++yzOfvss3PwwQenpqYm55xz\n",

"Th588MEkyaOPPpra2tr87u/+buv6o446aq/fc/v27dm6dWubY9euXV3w7AAAAKB6uizmN2zYkKOP\n",

"Pjq9evVKktTU1KS+vj5NTU1t1p100klZunRptm7dmh07duQ73/lOGhsbkyRr1qxJ//79c8kll2TM\n",

"mDE5//zz87Of/Wyv3/P2229Pnz592hwrVqzoqqcIAAAAVVH1D8CbOnVqJk6cmPHjx2f8+PEZPnx4\n",

"6/8A2LlzZ374wx9m9uzZWbVqVSZMmPC+b7OfNWtWtmzZ0uYYO3bs/noqAAAAsF90Wcx/9KMfzcaN\n",

"G7Nz584kv/z996amptTX17dZV1NTk1tuuSWrVq3K8uXLM2LEiBx33HFJkvr6+owZM6b19h/8wR9k\n",

"5cqV2bFjxx6/Z21tbXr37t3m6NmzZ1c9RQAAAKiKLov5AQMG5MQTT8xDDz2UJFm8eHHq6uoydOjQ\n",

"NuvefffdbN68OUnyxhtv5I477sjMmTOTJOecc06am5vz8ssvJ0m+//3v52Mf+1gOOuigrhobAAAA\n",

"ur1eXfng99xzT6ZOnZrbbrstvXv3zn333ZckmTZtWiZNmpRJkyZly5YtOfPMM9OjR4+0tLTkuuuu\n",

"y3nnnZckOfzwwzN//vz8zu/8TiqVSvr06ZNvf/vbXTkyAAAAdHs1lUqlUu0hutKMGTMyZ86cao8B\n",

"AAAAnabqH4AHAAAAdIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAA\n",

"gMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkA\n",

"AAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyY\n",

"BwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDC\n",

"iHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAA\n",

"KIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcA\n",

"AIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwtRU\n",

"KpVKtYfoShdccEEaGhqqPcY+7dq1KytWrMjYsWPTs2fPao/D+7BXZbFf5bBXZbFf5bBXZbFf5bBX\n",

"ZSltvwYNGpTrrrvufdcc8DFfiq1bt6ZPnz7ZsmVLevfuXe1xeB/2qiz2qxz2qiz2qxz2qiz2qxz2\n",

"qiwH4n55mz0AAAAURswDAABAYcQ8AAAAFEbMdxO1tbX5kz/5k9TW1lZ7FPbBXpXFfpXDXpXFfpXD\n",

"XpXFfpXDXpXlQNwvH4AHAAAAhfHKPAAAABRGzAMAAEBhxDwAAAAURszvR9dee20aGhpSU1OT1atX\n",

"73XdggULMmzYsAwZMiRXXnllduzYsf+GpFV79utf//Vfc+ihh2b06NGtx7Zt2/bvoOTdd9/N5MmT\n",

"M3z48IwaNSqf/vSns3bt2j2ufeSRR3Lsscdm2LBhueCCC7J169b9PO0HW3v3qrGxMT179mzzs7Vu\n",

"3boqTMxnPvOZnHDCCRk9enQ++clPZtWqVXtc59pVfe3ZK9et7uW+++5LTU1NHn744T2ed83qXt5v\n",

"v1y3uo+GhoYcc8wxrfvwD//wD3tcd0BctyrsN48//nhlw4YNlUGDBlVWrVq1xzU/+9nPKkcffXRl\n",

"48aNlZaWlsp5551Xufvuu/fvoFQqlfbt12OPPVYZNWrUfp2L3W3btq3yve99r9LS0lKpVCqVefPm\n",

"VcaPH7/burfeeqsyYMCAyvPPP1+pVCqVa665pnLDDTfsz1E/8Nq7V+vXr6/06dNn/w7HHm3evLn1\n",

"z0uWLKmccMIJu61x7eoe2rNXrlvdx/r16yunnXZa5dRTT61897vf3e28a1b3sq/9ct3qPt7vv91/\n",

"5UC5bnllfj8644wzUldX975rFi1alEmTJmXgwIGpqanJ1VdfnYULF+6nCfmf2rNfdA+HHHJIzj33\n",

"3NTU1CRJTj311DQ2Nu627gc/+EHGjBmTY489Nkny5S9/2c/XftbevaL76Nu3b+uft2zZ0rp3/5Nr\n",

"V/fQnr2ie2hpacm0adMyb968vf4zWa5Z3Ud79ouyHCjXrV7VHoC2mpqaMmjQoNbbDQ0NaWpqquJE\n",

"7Mu6dety4oknpmfPnrn88svz5S9/udojfeDNnTs3n/vc53a7f08/Xxs3bszOnTvTq5e/Dqthb3uV\n",

"JG+//XZOOeWU7Nq1K5MnT85NN92Unj177ucJSZLLLrssjz32WJLk+9///m7nXbu6j33tVeK61R3M\n",

"mTMn48aNy0knnbTXNa5Z3Ud79itx3epOLrvsslQqlYwdOzZ33HFH+vfv3+b8gXLd8jcB/B+ceOKJ\n",

"aW5uTp8+fdLc3Jxzzz03Rx55ZC666KJqj/aBddttt2Xt2rV59NFHqz0K+/B+e3X00Ufn5ZdfzoAB\n",

"A/Lf//3fufjii/ONb3wjM2fOrMKkPPDAA0mS+++/PzfeeONeI5Hq29deuW5V309+8pMsXrw4P/rR\n",

"j6o9Cu3Q3v1y3eo+fvSjH6W+vj47duzIzTffnC984QsH7HXL2+y7mfr6+rz00kuttxsbG1NfX1/F\n",

"iXg/vXv3Tp8+fZIkdXV1+b3f+70sW7asylN9cN15551ZsmRJfvCDH+Swww7b7fyefr6OPvpor3BU\n",

"wb72qra2NgMGDEiSfOhDH8oXv/hFP1vdwBe+8IU89thj+fnPf97mfteu7mdve+W6VX3Lli1LY2Nj\n",

"hg0bloaGhjz11FO56qqr8td//ddt1rlmdQ/t3S/Xre7jV9efgw46KF/96lf3uA8HynVLzHczU6ZM\n",

"ydKlS/Pqq6+mUqlk/vz5ueSSS6o9FnuxcePGtLS0JEneeuutPPLIIxkzZkyVp/pgmjNnThYuXJh/\n",

"/ud/bvN7o//TxIkTs3LlyrzwwgtJkm9961t+vqqgPXv12muvtX6q7Pbt27NkyRI/W1Xw5ptv5pVX\n",

"Xmm9/fDDD+fDH/5wPvShD7VZ59pVfe3dK9et6vvSl76UjRs3prGxMY2NjTn11FNz77335ktf+lKb\n",

"da5Z3UN798t1q3t4++238+abb7beXrhw4R734UC5bon5/Wj69Ompq6tLc3NzJkyYkKFDhyZJpk2b\n",

"lqVLlyZJBg8enFtvvTXjxo3L0KFD079//0yfPr2aY39gtWe/Fi9enJEjR2bUqFE59dRT8+lPfzqX\n",

"X355Ncf+QGpubs4f/uEf5s0338xZZ52V0aNH5+Mf/3iS5I//+I8zf/78JMkRRxyRv/3bv83kyZMz\n",

"dOjQNDc3Z/bs2dUc/QOnvXv1xBNPZMyYMRk1alROPPHEDBw4MDfddFM1R/9A2rJlSyZPntz699zd\n",

"d9+dRx55JDU1Na5d3Ux798p1q3tzzSqL61b3s2nTppx11lk54YQTMnLkyDz++OOtv350IF63aiqV\n",

"SqXaQwAAAADt55V5AAAAKIyYBwAAgMKIeQAAACiMmAeAD7iGhoasXr26Q19zww035JZbbumSeQCA\n",

"fRPzAAAAUBgxDwAkSc4888zccMMN+eQnP5khQ4bk6quvbj23cePGTJgwISNGjMjZZ5+d5ubm1nM7\n",

"duzI1772tYwdOzajR4/ORRddlM2bN+f1119PQ0NDnnrqqSTJokWLMmrUqGzbtm2/PzcAONCIeQCg\n",

"1bp16/LYY4/lJz/5Sf7pn/4pP/7xj5Mk1157bcaOHZs1a9bk/vvvz6OPPtr6NX/5l3+Zww8/PCtW\n",

"rMjq1aszcuTI3Hzzzenfv38efPDBfP7zn8+KFSvy1a9+Nf/4j/+YQw89tFpPDwAOGL2qPQAA0H1c\n",

"fPHF6dWrV3r16pXRo0dn3bp1Oe200/Loo4/mzjvvTJJ85CMfyaRJk1q/5uGHH86WLVuyePHiJMl7\n",

"772XhoaGJMknP/nJXHHFFTn99NPzwAMPZPjw4fv9OQHAgUjMAwCtDjnkkNY/9+zZMzt37tzjupqa\n",

"mtY/VyqVzJs3L5/5zGf2uHbVqlXp379/NmzY0LnDAsAHmLfZAwD7dPbZZ+fv/u7vkvzy9+eXLl3a\n",

"em7y5Mm566678s477yRJ3nnnnTz33HNJkrvvvjubN2/Os88+m3vuuSdPPvnk/h8eAA5AXpkHAPZp\n",

"7ty5mTp1akaMGJGPfOQj+dSnPtV67sYbb8z27dvz8Y9/vPUV+1/dd+edd+bf/u3fMmDAgDz00EO5\n",

"9NJL8/TTT+fDH/5wtZ4KABwQaiqVSqXaQwAAAADt5232AAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACF\n",

"EfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR8wAAAFAYMQ8AAACF+X88+HKRtt2IEwAAAABJRU5E\n",

"rkJggg==\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-27a4277b-e57a-41c6-a05f-164aeedf2fcf\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-27a4277b-e57a-41c6-a05f-164aeedf2fcf\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x786710c35b70>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">Values</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_8['Index'].plot(kind='line', figsize=(8, 4), title='Index')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-8df302c6-ffa6-40be-a3c1-ebf2ded91e9f\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAA93ElEQVR4nO3de1jUdf7//wcHxRMHRUEQAYFRM8+mYp7B7eC2apllbZuV5LHA\n",

"y91ve3W1tmv7ufLz+27rL9TV1nRbq81OHiqrz2cDxVNmlocyLWeA4aAgnjgoMMDw/v4xiLFiiTIM\n",

"MPfbdXFdznteDE9e1/T23nvA8TAMwxAAAADgBJ6uHgAAAACtF7EJAAAApyE2AQAA4DTEJgAAAJyG\n",

"2AQAAIDTEJsAAABwGmITAAAATkNsAgAAwGmITQAAADgNsQkATvbII4/osccec/UYAOASxCYA/IwJ\n",

"EyboD3/4g6vHAIAWidgEAACA0xCbANAAkZGReuGFFzR58mT5+voqOjpaW7ZsqbPmL3/5i8LDwxUQ\n",

"EKCEhARVVFTUub+wsFDz589XRESEAgMDNXnyZGVkZEiSjh8/Lj8/P33wwQe16+fPn6/bbrtNNpvN\n",

"+d8gADQyYhMAGmjdunX6r//6LxUVFWnhwoWaNWuWiouLJUlvvfWWXnzxRb399ts6c+aMRowYUSdG\n",

"DcPQvffeq+LiYh06dEinTp3SgAEDdM8996iyslK33HKL1q9fr1mzZsliseiNN97Qu+++q/fff18+\n",

"Pj6u+pYB4IYRmwDQQAkJCRo6dKg8PT01d+5clZSU6Pjx45Kk1157TU888YRuv/12tWnTRnPmzNHA\n",

"gQNrP/fQoUPau3ev/v73v6tLly7y8fHRiy++qMzMTO3fv1+SNGPGDM2ePVv33HOPFixYoDfffFOR\n",

"kZGu+FYB4KYRmwDQQKGhobV/7tixoySppKREkpSbm6tevXrVWf/j22azWVVVVQoLC1NAQIACAgIU\n",

"GBgoScrJyaldl5SUJIvFogEDBujuu+922vcCAM5GbAJAIwoLC5PVaq1z7Me3u3fvrrZt2+rMmTMq\n",

"LCys/SgrK9NDDz0kSaqsrNRDDz2k6dOny2q1atWqVU34HQBA4yI2AaARzZo1S//4xz/0xRdfqKqq\n",

"SuvWrdORI0dq7x8zZoz69++v+fPnq6CgQJJ04cIFbdq0SaWlpZKk3/3udyorK9OGDRv0zjvv6Pe/\n",

"/33tS+wA0NIQmwDQiH7961/rmWee0YwZM9S1a1d98cUXuvfee2vv9/Ly0meffaYOHTpo5MiR8vX1\n",

"1aBBg7RlyxZ5eHjo7bff1ptvvqlNmzapXbt2Gjt2rF544QXdf//9OnPmjAu/MwC4MR6GYRiuHgIA\n",

"AACtE1c2AQAA4DTEJgAAAJyG2AQAAIDTEJsAAABwGmITAAAATkNsAgAAwGmITQAAADhNs4zN5ORk\n",

"V48AAACARtAsYzMrK8vVIwAAAKARNMvYBAAAQOtAbAIAAMBpiE0AAAA4DbEJAAAApyE2AQAA4DTE\n",

"JgAAAJyG2AQAAIDTEJsAAABwmgbHZmRkpPr06aPBgwdr8ODBeuedd+pdt379eplMJkVHR+vJJ59U\n",

"ZWXlTQ8LAACAluWGrmy+8847Onz4sA4fPqwHH3zwqvszMzO1ZMkS7d69WxaLRadPn9batWtvelgA\n",

"AAC0LE55Gf3999/XlClT1L17d3l4eGjevHnauHGjM74UAAAAJFXaq109Qr1uKDYfffRRDRgwQLNn\n",

"z9aZM2euuj87O1sRERG1tyMjI5WdnV3vY9lsNhUXF9f5sNvtNzIWAACA2ykqq9TLKSd0+39v1+ni\n",

"clePc5UGx+auXbv0zTff6ODBg+ratatmzZp1UwMsW7ZM/v7+dT6+/PLLm3pMAACA1q6otFL//2cn\n",

"NOb/266XU8w6U2LTuwdyXD3WVbwb+gnh4eGSpDZt2mjRokXq3bt3vWvS09Nrb1ut1trP+0/PPvus\n",

"Fi9eXOfYkiVLGjoWAACAWygsrdA/9mTqtb1WldiqJEm9gzspMd6kyf1DXDzd1RoUm5cuXVJlZaUC\n",

"AgIkSRs3btSQIUOuWjd9+nSNGTNGf/rTnxQcHKxXXnlFM2fOrPcxfXx85OPjU+eYl5dXQ8YCAABo\n",

"9QpLK7Rud6b++blVF2sis293XyXGm3TXrd3l6enh4gnr16DYPH36tKZPny673S7DMBQVFaXXX39d\n",

"kpSQkKApU6ZoypQpioqK0tKlSzV69GhJ0oQJEzR37tzGnx4AAKCVu3CpQuv2ZGjD51l1InPRJJPu\n",

"6Nd8I/MyD8MwDFcP8Z8WL16s5cuXu3oMAAAAlzl/qUKv7s7Q659bdanC8cvT/UL8lBhv0h39gpt9\n",

"ZF7W4J/ZBAAAgPOcu2jT2t0ZemNflkprIvPWUD8lxZv0i37B8vBoGZF5GbEJAADQDJy9aNOruzL0\n",

"+r4slVU6IrN/Dz8tiu+t+FuCWlxkXkZsAgAAuNCZEpvW7krXm19k10bmwDB/JcWbFNe35UbmZcQm\n",

"AACACxSUlOvvOzP0r/1ZKq90vPvPoJ4BWhRv0oQ+3Vp8ZF5GbAIAADShguJyvVITmbYqR2QO7hmg\n",

"RZNMGt+79UTmZcQmAABAEzhdXK41aena+GV2bWQODQ9Q0qTeGmfq2uoi8zJiEwAAwInyi8q1Js2i\n",

"jQdyVFETmbdFdFbSJJPGxLTeyLyM2AQAAHCCvKIyrUlL19tf5qjC7ojM4ZGdtWhSb90eHdjqI/My\n",

"YhMAAKARnSos0+o0i949kFsbmSN6ddGieJNGuVFkXkZsAgAANIKThWVavcOid7/KUaXd8QaNsVFd\n",

"lBTfW6OiA108nesQmwAAADch53ypVqel6/2vr0TmqKhAJU0yKTbKfSPzMmITAADgBuScL9Xfdlj0\n",

"/te5qqp2RObomEAlxffWiF5dXDxd80FsAgAANED2uVKt2mHW5oMnayNzTExXJU0yaXgkkfmfiE0A\n",

"AIDrkHXuklZtt2jzoZOy10TmWFNXLZpk0rAIIvNaiE0AAICfYD17SSu3W7T18JXIHN+7mxLjTRoW\n",

"0dnF0zV/xCYAAEA9Ms5c1KqayKxpTE3o001J8SYNCScyrxexCQAA8CPpNZH5wY8iM65vkBLjTRrc\n",

"M8Cls7VExCYAAIAkS8FFrdxu1kdHTtVG5qRbHJE5MCzApbO1ZMQmAABwa+bTJVqx3aJt35ySURuZ\n",

"wUqKN2lAmL9rh2sFiE0AAOCWTpwu0YpUsz7+Nq82Mu/oF6zEeJP69yAyGwuxCQAA3MoP+Y7I/OTo\n",

"lci869buejo+RreGEpmNjdgEAABu4XhesVakmvXp0fzaY3f3767EeJNuCfFz4WStG7EJAABatWOn\n",

"HJH5P985ItPDQ5rcP0RPx8eob3ci09mITQAA0CodPVmkFalm/fvYaUmOyPzlgBAlxpvUO9jXxdO5\n",

"D2ITAAC0KkdPFunlFLNSjl+JzHsGhioxLkYmIrPJEZsAAKBV+Da3SMmpJ5RyvECS5Okh/WpQqJ6O\n",

"i1FMEJHpKp43+omvvfaaPDw8tHXr1qvus1qt8vLy0uDBg2s/0tPTb2ZOAACAeh3JKdQT/zygX63a\n",

"o5TjBfL0kO4d0kOfLR6v5JlDCE0Xu6Erm1arVa+++qpiY2OvucbX11eHDx++0bkAAAB+0qHsC0pO\n",

"NSvthzOSHFcypw3uoafiYhTVrZOLp8NlDY7N6upqJSQkaOXKlfrtb3/rjJkAAACu6WD2BSWnmLXz\n",

"hCMyvTw9aiOzV9eOLp4O/6nBsbl8+XKNHj1aw4YN+8l1ly5d0vDhw2W32zVt2jQ999xz8vLyumqd\n",

"zWaTzWarc8xutzd0LAAA0Mp9nXVeL6eYtdt8VpIjMu8b0kMLJ8YokshsthoUm0ePHtWmTZu0a9eu\n",

"n1wXEhKikydPKigoSOfPn9eDDz6ov/71r3rmmWeuWrts2TItXbq0zrGfenkeAAC4lwPW80pOMWuP\n",

"xRGZ3p4eum+oIzIjAonM5s7DMC6/UdPPW7NmjV544QX5+PhIkvLz8+Xn56elS5dq/vz51/y8jRs3\n",

"6q233tJHH3101X31XdlcsmSJkpOTr3csAADQCn2ZeV7JqSe013JOkiMy7x8WpoUTY9SzSwcXT4fr\n",

"1aArm/Pnz68TlRMmTNCiRYs0bdq0OusKCgrUuXNntWnTRjabTZs3b9aQIUPqfUwfH5/aeL2svpfb\n",

"AQCAe/gi45ySU8zal3ElMmfc1lMLJkQTmS1Qo/07m88//7xCQ0M1b9487dmzR88//7y8vLxUVVWl\n",

"uLg4Pffcc431pQAAQCu0L/2cXk45of2Z5yVJbbyuRGZYZyKzpWrQy+hNZfHixVq+fLmrxwAAAE5m\n",

"GIYjMlPN+rImMtt6eeqB4WGaPyFGPQLau3hC3CzeQQgAADQ5wzC013JOyakndMB6QZIjMh8c3lPz\n",

"J0QrlMhsNYhNAADQZAzD0B7LWb2cYtbXWTWR6e2ph4b31LwJ0QrxJzJbG2ITAAA4nWEY2mU+q+SU\n",

"EzqYXSjJEZkPjwjXvPHR6u7fzrUDwmmITQAA4DSGYSjtxBklp5h1OKdQkuTj7amHRzoiM9iPyGzt\n",

"iE0AANDoDMNQ2g9n9HKqWUdqIrNdG0/9emSE5o6LUhCR6TaITQAA0GgMw9D27wuUnGrWN7lFkhyR\n",

"+ZvYCD05LkpBvkSmuyE2AQDATTMMQynHC7Qi1axvTzois30bL/1mVISeHBulbr4+P/MIaK2ITQAA\n",

"cMMMw9Bnx04rOdWs704VS5I6tL0SmV07EZnujtgEAAANVl1t6N/HTmtFqlnH8hyR2bGtlx69PVIJ\n",

"Y3opkMhEDWITAABct+pqQ//7Xb6SU836Pr9EkiMyZ90eqYSxUerSsa2LJ0RzQ2wCAICfVV1t6H++\n",

"y9eKH0VmJx9vPXZ7pGaP6aXORCaugdgEAADXVF1t6JOjeVqZatEPpx2R6evjrcdHR+qJMb0U0IHI\n",

"xE8jNgEAwFXs1YY+/jZPK1PNMhdclCT5tvPW46N7afboXvLv0MbFE6KlIDYBAEAte7Whbd+c0srt\n",

"Fll+FJmzx/TS46N7yb89kYmGITYBAIDs1YY+OnJKK7eblX7mkiTJr523Zo+J0mOjI4lM3DBiEwAA\n",

"N1Zlr9aHR05p1XaLMs46ItO/fRsljOmlWaMj5deOyMTNITYBAHBDVfZqfXD4lFbtsCizJjIDOrTR\n",

"k2Oj9OioCPkSmWgkxCYAAG6kyl6tLYdO6m87LLKeK5Ukde7QRgljozTr9kh18iEN0Lh4RgEA4AYq\n",

"7dXacvCkVu2wKPu8IzK7dGxbeyWzI5EJJ+GZBQBAK1Zpr9bmg7latcOinPNlkqTAjm01Z1yUHokl\n",

"MuF8PMMAAGiFKqqqtelgrv62w6LcC47I7NrpSmR2aEsCoGnwTAMAoBWpqKrWe1/naPWOdJ0svByZ\n",

"Ppo3Pkq/Hhmh9m29XDwh3A2xCQBAK2Crsuu9r3K1eodFp4rKJUndfH00b3y0Hh4RTmTCZYhNAABa\n",

"MFuVXe8eyNHqtHTl1URm0OXIHBmudm2ITLgWsQkAQAtUXmnXOwdytCYtXfnFjsgM9vPR/PHRmjmC\n",

"yETzQWwCANCClFfa9faX2VqzM12ni22SpO5+7bRgYrQeuK0nkYlmx/NGP/G1116Th4eHtm7dWu/9\n",

"27ZtU9++fWUymXTfffepuLj4Rr8UAABur7zSrn/sydS4/7tDf/romE4X2xTi305/nnqrdj4zQY+O\n",

"iiQ00Szd0JVNq9WqV199VbGxsfXef/HiRc2ePVs7d+5U37599dRTT+nPf/6z/vKXv9zUsAAAuJuy\n",

"Crv+tT9Lf9+VoTMljiuZof7ttGBijGbcFiYfbwITzVuDr2xWV1crISFBK1eulI+PT71rPv30Uw0Z\n",

"MkR9+/aVJC1YsEAbN268uUkBAHAjZRV2rdudobH/d4f+6+PjOlNiU4+A9nrx3gFK+z8T9UhsBKGJ\n",

"FqHBVzaXL1+u0aNHa9iwYddck52drYiIiNrbkZGRysvLU1VVlby9635Jm80mm81W55jdbm/oWAAA\n",

"tAqlFVV684ssrd2VobMXKyRJYZ3ba+HEGE0fGqa23jf8E3CASzQoNo8ePapNmzZp165djTbAsmXL\n",

"tHTp0jrHrvXyPAAArdUlW5Xe+CJLr+7K0LlLjsjs2aW9npoYo/uGhqmNF5GJlqlBsbl7925ZrVaZ\n",

"TCZJUn5+vubMmaO8vDzNnz+/dl14eLg+++yz2ttWq1UhISFXXdWUpGeffVaLFy+uc2zJkiUN+iYA\n",

"AGipLtmq9Pq+LL26O0PnayIzvEsHPTUxRvcO7UFkosXzMAzDuNFPnjBhghYtWqRp06bVOV5SUqLo\n",

"6Gjt2rWr9heE2rVrp5deeum6Hnfx4sVavnz5jY4FAECzd9FWpQ2fW7Vud4YulFZKkiICHZE5bQiR\n",

"idaj0f6dzeeff16hoaGaN2+efH19tW7dOk2bNk1VVVXq37+/NmzY0FhfCgCAFqukvNIRmXsyVVgT\n",

"mb26dtRTE2M0dXCovIlMtDI3dWXTWbiyCQBobYrLK7VhryMyi8ockRnVtaOejo/RrwYSmWi9eAch\n",

"AACcqKisUv/ca9X6PRkqLq+SJEV166jEOJN+NShUXp4eLp4QcC5iEwAAJygqq9Q/9mTqH3szVVIT\n",

"mTFBnfR0XIzuGUhkwn0QmwAANKKi0kqt35up134UmaagTkqMN2nygBAiE26H2AQAoBEUllZo/Z5M\n",

"/XOvVSU2R2T2Dq6JzP4h8iQy4aaITQAAbsKFSxVatydDGz7P0sWayOzb3VeJ8SbddWt3IhNuj9gE\n",

"AOAGnL9UoXW7M7Thc6suVTjeZrlvd18tmmTSHf2ITOAyYhMAgAY4d9GmV3dn6vV9VpXWRGa/ED8l\n",

"xpt0R79gIhP4D8QmAADX4exFm17dlaE3vsiqjcxbQ/2UFG/SL/oFy8ODyATqQ2wCAPATzl60ae2u\n",

"DL2xL0tllY7I7N/DT4vieyv+liAiE/gZxCYAAPUoKCnX2p0ZenN/lsorqyVJA8P8lRRvUlxfIhO4\n",

"XsQmAAA/UlBcrld2Zuhf+7Nkq3JE5qCeAVoUb9KEPt2ITKCBiE0AAOSIzDU70/XW/uzayBzcM0CL\n",

"Jpk0vjeRCdwoYhMA4Nbyi8r1ys50vfVltipqInNoeICSJvXWOFNXIhO4ScQmAMAt5RWVaU1aut4+\n",

"kFMbmcMiOmvRJJPGxBCZQGMhNgEAbuVUoSMy3zmQowq7IzKHR3ZWUnxvjY4JJDKBRkZsAgDcwsnC\n",

"Mq3eYdF7X+XWRuaIXl20KN6kUdFEJuAsxCYAoFXLvVCq1Wnpeu+rHFXaDUnSyF5dtGhSb42KDnTx\n",

"dEDrR2wCAFqlnPOlWp1m0ftf59ZG5qioQCVNMik2isgEmgqxCQBoVbLPlepvOyzadDBXVdWOyBwd\n",

"E6ik+N4a0auLi6cD3A+xCQBoFbLPlWrVDrM2HTwpe01kjonpqqRJJg2PJDIBVyE2AQAtmvXsJa3a\n",

"YdGWQ1cic6ypqxZNMmlYBJEJuBqxCQBokTLPXtLK7WZ9cPhUbWSO791NifEmDYvo7OLpAFxGbAIA\n",

"WpSMMxe1artFWw+fVE1jakKfbkqKN2lIOJEJNDfEJgCgRbAUXNSq7WZ9eORUbWTG9Q1SYrxJg3sG\n",

"uHQ2ANdGbAIAmjVLQYlWpFr00TenZNRE5qRbHJE5MCzApbMB+HnEJgCgWTKfLtGK7RZtqxOZwUqK\n",

"N2lAmL9rhwNw3Rocm3fccYfy8/Pl6ekpX19frVixQkOGDKmzJi0tTXfffbf69OlTe2zfvn1q3779\n",

"zU8MAGjVfsgv0YrtZn3ybV5tZN7RL1iJ8Sb170FkAi1Ng2Pz3XffVUBAgCRpy5Yteuyxx3TkyJGr\n",

"1vXp00eHDx++2fkAAG7i+/xirUg165Nv82uP3XVrdz0dH6NbQ4lMoKVqcGxeDk1JKioqkoeHR2PO\n",

"AwBwM8fzHJH56dErkXl3/+5KjDfplhA/F04GoDHc0M9sPvroo9qxY4ck6ZNPPql3TXp6uoYOHSov\n",

"Ly89/vjjWrBgQb3rbDabbDZbnWN2u/1GxgIAtCDfnSrSilSz/ve707XHfjkgRE/Hx6hvdyITaC08\n",

"DOPyT8Q03IYNG/TOO+9cFZzFxcUyDEP+/v7Kzc3V5MmT9Yc//EEPPPDAVY/xpz/9SUuXLq1zLDY2\n",

"Vvv27bvRsQAAzdjRk0VKTjXrs2OOyPTwkCYPCFFinEl9uvu6eDoAje2mYlOS2rdvr9zcXAUGBl5z\n",

"zbJly3Tq1CmtXLnyqvvqu7K5ZMkSJScn38xYAIBm5ttcR2SmHL8SmfcMDFViXIxMwUQm0Fo16GX0\n",

"wsJClZaWKjQ0VJK0detWBQYGqkuXuu89m5eXp+DgYHl6eqqkpETbtm3T7Nmz631MHx8f+fj41Dnm\n",

"5eXVkLEAAM3YN7mFSk4xK/X7AkmOyJwyKFRPx8UoJojIBFq7BsVmUVGRZsyYobKyMnl6eqpbt27a\n",

"tm2bPDw8lJCQoClTpmjKlCnatGmT1qxZI29vb1VVVWnGjBl6/PHHnfU9AACaoSM5hUpONWt7TWR6\n",

"1kTmU3EmxQR1cvF0AJrKTb+M7gyLFy/W8uXLXT0GAOAGHMq+oORUs9J+OCPJEZnTBvfQU3ExiupG\n",

"ZALuhncQAgA0iq+zHJG564QjMr08PWojs1fXji6eDoCrEJsAgJvyddZ5vZxi1m7zWUmOyLx3SA89\n",

"NTFGkUQm4PaITQDADTlgPa/kFLP2WK5E5vShPbRwYowiAolMAA7EJgCgQfZnnFNyqlmfp5+TJHl7\n",

"euj+YWFaODFGPbt0cPF0AJobYhMAcF2+yDin5BSz9mVcicwZt4VpwQQiE8C1EZsAgGsyDEP7aiJz\n",

"f+Z5SVIbLw/NuK2nFkyIVlhnIhPATyM2AQBXMQxD+9LP6eUUs760XonMB4f31PwJMeoR0N7FEwJo\n",

"KYhNAEAtwzC013JOyakndMB6QZLU1suzJjKjFUpkAmggYhMAIMMwtNt8VsmpZn2dVROZ3p56aHhP\n",

"zZsQrRB/IhPAjSE2AcCNGYahXeazejnlhA5lF0pyRObDI8I1b3y0uvu3c+2AAFo8YhMA3JBhGEo7\n",

"cUbJKWYdzimUJPl4e+rhkY7IDPYjMgE0DmITANyIYRja8UOBklMtOlITme3aeOrXIyM0d1yUgohM\n",

"AI2M2AQAN2AYhrZ/X6DkVLO+yS2S5IjMR0ZGaM74KAX5EpkAnIPYBIBWzDAMpRwv0IpUs7496YjM\n",

"9m289JtREXpybJS6+fq4eEIArR2xCQCtkGEY+vex01qRatZ3p4olSR3aXonMrp2ITABNg9gEgFak\n",

"utoRmcmpZh3PuxKZj46K1JNjeymQyATQxIhNAGgFqqsN/e93+UpONev7/BJJUse2Xpp1e6QSxkap\n",

"S8e2Lp4QgLsiNgGgBauuNvTp0Xyt3H4lMjv5eOux2yM1e0wvdSYyAbgYsQkALVB1taFPjuZpRapZ\n",

"J05flCT5+njrsdGOyAzoQGQCaB6ITQBoQezVhj7+Nk8rU80yF1yJzMfH9NLs0b3k36GNiycEgLqI\n",

"TQBoAezVhrZ9c0ort1tkuRyZ7bz1xOheeoLIBNCMEZsA0IzZqw19dOSUVmw3K+PMJUmSXztvzR4T\n",

"pcdGR8q/PZEJoHkjNgGgGaqyV+vDI6e0artFGWcdkenfvo0SxvTSrNGR8mtHZAJoGYhNAGhGquzV\n",

"2nr4lP62w6LMmsgM6FATmbdHypfIBNDCEJsA0AxU2au15dBJrdphUda5UklS5w5tlDA2SrNuj1Qn\n",

"H07XAFomzl4A4EKV9mptOeiIzOzzjsjs0rGtnhwbpd+MiiAyAbR4DT6L3XHHHcrPz5enp6d8fX21\n",

"YsUKDRky5Kp169ev13//93+rurpacXFxWr16tdq04eUfAJAckbnp61z9Lc2inPNlkqTAjm315Lgo\n",

"/SY2Qh2JTACtRIPPZu+++64CAgIkSVu2bNFjjz2mI0eO1FmTmZmpJUuW6ODBgwoODtbUqVO1du1a\n",

"LVy4sFGGBoCWqqKqWpsO5mrVdotOFjois2untpozLkqPxEaoQ1siE0Dr0uCz2uXQlKSioiJ5eHhc\n",

"teb999/XlClT1L17d0nSvHnz9OKLLxKbANxWRVW13vs6R6t3pP8oMn00b3yUfj0yQu3berl4QgBw\n",

"jhv6X+hHH31UO3bskCR98sknV92fnZ2tiIiI2tuRkZHKzs6u97FsNptsNludY3a7/UbGAoBmx1Zl\n",

"17tf5eqVtCuR2c3XR3PHEZkA3MMNxebrr78uSdqwYYN+//vf1xuc12vZsmVaunRpnWOxsbE3/HgA\n",

"0BzYqux690COVqelK6+oXJIU5OujeeOj9fDIcLVrQ2QCcA839cNBs2bN0rx583Tu3DkFBgbWHg8P\n",

"D1d6enrtbavVqvDw8Hof49lnn9XixYvrHFuyZMnNjAUALlNeadc7B3K0Ji1d+cWOyAz2c0TmQyOI\n",

"TADup0GxWVhYqNLSUoWGhkqStm7dqsDAQHXp0qXOuunTp2vMmDH605/+pODgYL3yyiuaOXNmvY/p\n",

"4+MjHx+fOse8vDgZA2hZyivt2vhltl7Zma7TxY4fDeru107zJ0TrweE9iUwAbqtBsVlUVKQZM2ao\n",

"rKxMnp6e6tatm7Zt2yYPDw8lJCRoypQpmjJliqKiorR06VKNHj1akjRhwgTNnTvXKd8AALhSeaVd\n",

"b+13RGZBiSMyQ/zbacGEaM24jcgEAA/DMAxXD/GfFi9erOXLl7t6DAC4prIKu/61P0t/35WhMzWR\n",

"GerfTgsmxmjGbWHy8SYyAUDiHYQAoEFKK6r0ry+y9fddGTp70RGZPQLaa8HEaN0/jMgEgP9EbALA\n",

"dSitqNKbX2Rp7a4Mnb1YIUkK69xeCyfGaPrQMLX19nTxhADQPBGbAPATLtmq9MYXWXp1V4bOXboS\n",

"mU/Hxei+oWFq40VkAsBPITYBoB4XbVV6fZ9V63Zn6nxNZIZ36aCnJsbo3qE9iEwAuE7EJgD8yEVb\n",

"lTZ8btW63Rm6UFopSYoIdETmtCFEJgA0FLEJAJJKyisdkbknU4U1kRkZ2EFPx5k0dXCovIlMALgh\n",

"xCYAt1ZcXqkNex2RWVTmiMyorh31VFyMpgwiMgHgZhGbANxSUVml/rnXqvV7MlRcXiVJiurWUYlx\n",

"Jv1qUKi8PD1cPCEAtA7EJgC3UlRWqX/sydQ/9maqpCYyo7t1VGK8SfcMJDIBoLERmwDcQlFppdbv\n",

"zdRrP4pMU1AnPR1v0i8HhBCZAOAkxCaAVq2wtELr92Tqn3utKrE5IrN3cCclxps0uX+IPIlMAHAq\n",

"YhNAq3ThUoXW7cnQhs+zdLEmMvsE+yppkkl33dqdyASAJkJsAmhVzl+q0LrdGdrwuVWXKuySpL7d\n",

"fZUUb9KdRCYANDliE0CrcO6iTa/uztTr+6wqrYnMfiF+Sow36Y5+wUQmALgIsQmgRTt70aZXd2Xo\n",

"jS+yaiPz1lA/JcWb9It+wfLwIDIBwJWITQAt0tmLNq3dlaE39mWprNIRmf17+Ckpvrcm3RJEZAJA\n",

"M0FsAmhRCkrKtXZnht7cn6XyympJ0sAwfyXFmxTXl8gEgOaG2ATQIhQUl+uVnRn61/4s2aockTko\n",

"zF+LJvXWhD7diEwAaKaITQDNWkFxudbsTNdb+7NrI3NwzwAlTTJpQm8iEwCaO2ITQLOUX1SuV3am\n",

"660vs1VRE5lDwwOUNKm3xpm6EpkA0EIQmwCalbyiMq1JS9fbB3JqI3NYRGctmmTSmBgiEwBaGmIT\n",

"QLNwqtARme8cyFGF3RGZwyM7Kym+t0bHBBKZANBCEZsAXOpkYZnWpFn07oHc2sgc0auLFsWbNCqa\n",

"yASAlo7YBOASuRdKtTotXe99laNKuyFJGtmrixZN6q1R0YEung4A0FiITQBNKud8qVanWfT+17m1\n",

"kTkqKlBJk0yKjSIyAaC1ITYBNImc86X62w5HZFZVOyLz9uhAJcWbNJLIBIBWq0GxWV5erpkzZ+rY\n",

"sWNq3769goKCtGbNGsXExNRZZ7VaFR0drQEDBtQe27Rpk6KjoxtnagAtRva5Uq3aYdbmgydrI3NM\n",

"TFclTTJpeGQXF08HAHC2Bl/ZnDNnju6++255eHho1apVSkhIUFpa2lXrfH19dfjw4UYYEUBLZD17\n",

"Sat2WLTl0EnZayJzrKmrFk0yaVgEkQkA7qJBsdmuXTtNnjy59nZsbKxeeumlRh8KQMuVefaSVm23\n",

"aOvhK5E5rnc3JcWbNCyis4unAwA0tZv6mc3k5GRNnTq13vsuXbqk4cOHy263a9q0aXruuefk5eV1\n",

"1TqbzSabzVbnmN1uv5mxALhAxpmLtZFZ05ia0McRmUPCiUwAcFc3HJsvvviiLBaLUlNTr7ovJCRE\n",

"J0+eVFBQkM6fP68HH3xQf/3rX/XMM89ctXbZsmVaunRpnWOxsbE3OhaAJmYpuKhV28368Mip2siM\n",

"6xukxHiTBvcMcOlsAADX8zAMw2joJ7300kt6++23lZKSooCAgJ9dv3HjRr311lv66KOPrrqvviub\n",

"S5YsUXJyckPHAtCELAUlWrndog+PnNLls0h8TWQOIjIBADUafGVz+fLl2rhx40+GZkFBgTp37qw2\n",

"bdrIZrNp8+bNGjJkSL1rfXx85OPjU+dYfS+3A2gezKdLtGK7Rdu+uRKZk24JVlK8SQPC/F07HACg\n",

"2WlQbObm5uq3v/2toqKiNHHiREmOWNy/f7+ef/55hYaGat68edqzZ4+ef/55eXl5qaqqSnFxcXru\n",

"ueec8g0AaBo/5JdoxXazPvk2rzYy7+gXrMR4k/r3IDIBAPW7oZfRnW3x4sVavny5q8cAIOn7/GKt\n",

"TLXo42/zao/deasjMm8NJTIBAD+NdxACUK/jecVakWrWp0fza4/d3b+7EuNNuiXEz4WTAQBaEmIT\n",

"QB3fnSrSilSz/ve707XHfjkgRE/Hx6hvdyITANAwxCYASdLRk47I/PcxR2R6eEiTB4QoMc6kPt19\n",

"XTwdAKClIjYBN/dtbpGSU81KOX4lMu8ZGKrEuBiZgolMAMDNITYBN/VNbqGSU8xK/b5AkiMypwwK\n",

"1dNxMYoJIjIBAI2D2ATczJGcQiWnmrW9JjI9ayLzqTiTYoI6uXg6AEBrQ2wCbuJQ9gUlp5qV9sMZ\n",

"SY7InDa4h56Ki1FUNyITAOAcxCbQyn2d5YjMXScckenl6VEbmb26dnTxdACA1o7YBFqpr7PO6+UU\n",

"s3abz0pyROa9Q3roqYkxiiQyAQBNhNgEWpkD1vNKTjFrj+VKZE4f2kMLJ8YoIpDIBAA0LWITaCX2\n",

"Z5xTcqpZn6efkyR5e3ro/mFhWjgxRj27dHDxdAAAd0VsAi3cFxnnlJxi1r6MK5E547YwLZhAZAIA\n",

"XI/YBFqofenn9HLKCe3PPC9JauPloRm39dSCCdEK60xkAgCaB2ITaEEMw3BEZqpZX/4oMh8c3lPz\n",

"J8SoR0B7F08IAEBdxCbQAhiGob2Wc0pOPaED1guSpLZenjWRGa1QIhMA0EwRm0AzZhiG9ljO6uUU\n",

"s77OqolMb089NLyn5k2IVog/kQkAaN6ITaAZMgxDu8xnlZxyQgezCyU5IvPhEeGaNz5a3f3buXZA\n",

"AACuE7EJNCOGYSjtxBklp5h1OKdQkuTj7amHRzoiM9iPyAQAtCzEJtAMGIahtB/O6OVUs47URGa7\n",

"Np769cgIzR0XpSAiEwDQQhGbgAsZhqHt3xcoOdWsb3KLJDki85GREZozPkpBvkQmAKBlIzYBFzAM\n",

"QynHC7Qi1axvTzois30bL/1mVISeHBulbr4+Lp4QAIDGQWwCTcgwDH127LSSU8367lSxJKlD2yuR\n",

"2bUTkQkAaF2ITaAJVFcb+vex01qRataxvCuR+eioSD05tpcCiUwAQCtFbAJOVF1t6H+/y1dyqlnf\n",

"55dIkjq29dKs2yOVMDZKXTq2dfGEAAA4F7EJOEF1taH/+S5fK34UmZ18vPXY7ZGaPaaXOhOZAAA3\n",

"QWwCjai62tAnR/O0MtWiH047ItPXx1uPjXZEZkAHIhMA4F4aFJvl5eWaOXOmjh07pvbt2ysoKEhr\n",

"1qxRTEzMVWu3bdum3/3ud7Lb7RowYID++c9/ys/Pr9EGB5oTe7Whj7/N08pUs8wFFyU5IvPxMb00\n",

"e3Qv+Xdo4+IJAQBwDc+GfsKcOXP0ww8/6MiRI5o6daoSEhKuWnPx4kXNnj1bW7duldlsVmhoqP78\n",

"5z83ysBAc2KvNvTB4ZO68+VdStx4SOaCi/Jt562keJP2/D5Oi3/Rm9AEALi1Bl3ZbNeunSZPnlx7\n",

"OzY2Vi+99NJV6z799FMNGTJEffv2lSQtWLBAd9xxh/7yl7/c5LhA82CvNvTRkVNaud2s9DOXJEl+\n",

"7bw1e0yUHhsdKf/2BCYAANJN/sxmcnKypk6detXx7OxsRURE1N6OjIxUXl6eqqqq5O1d90vabDbZ\n",

"bLY6x+x2+82MBThNlb1aHx45pVXbLco464hM//ZtlDCml2aNjpRfOyITAIAfu+HYfPHFF2WxWJSa\n",

"mnpTAyxbtkxLly6tcyw2NvamHhNobFX2an1w+JRW7bAosyYyAzrURObtkfIlMgEAqNcNxeZLL72k\n",

"zZs3KyUlRR06dLjq/vDwcH322We1t61Wq0JCQq66qilJzz77rBYvXlzn2JIlS25kLKDRVdmrteXQ\n",

"Sf1th0XWc6WSpM4d2ihhbJRm3R6pTj78gw4AAPyUBv9NuXz5cm3cuFEpKSkKCAiod81dd92lhQsX\n",

"6vvvv1ffvn21evVqzZw5s961Pj4+8vGp++4pXl5eDR0LaFSV9mptOXhSq3ZYlH3eEZldOrbVk2Oj\n",

"9JtREUQmAADXqUF/Y+bm5uq3v/2toqKiNHHiREmOWNy/f7+ef/55hYaGat68efL19dW6des0bdo0\n",

"VVVVqX///tqwYYNTvgGgMVXaq7X5YK5W7bAo53yZJCmwY1s9OS5Kv4mNUEciEwCABvEwDMNw9RD/\n",

"afHixVq+fLmrx4Abqaiq1qaDufrbDotyLzgis2untpozLkqPxEaoQ1siEwCAG8HfoHBrFVXVeu/r\n",

"HK3eka6ThZcj00fzxkfp1yMj1L4tP9IBAMDNIDbhlmxVdr33Va5W77DoVFG5JKmbr4/mjiMyAQBo\n",

"TMQm3Iqtyq53D+RodVq68moiM8jXR/PGR+vhkeFq14bIBACgMRGbcAvllXa9cyBHa9LSlV/siMxg\n",

"Px/NHx+tmSOITAAAnIXYRKtWXmnX219ma83OdJ0udrxTVXe/dpo/IVoPDu9JZAIA4GTEJlql8kq7\n",

"3tqfrVd2pqugxBGZIf7ttGBCtB4Y3lM+3kQmAABNgdhEq1JWYde/9mfp77sydKYmMkP922nBxBjN\n",

"uC2MyAQAoIkRm2gVLkfmKzszdPaiIzJ7BLTXgonRun8YkQkAgKsQm2jRSiuq9OYXWVq7K0NnL1ZI\n",

"ksI6t9fCiTGaPjRMbb09XTwhAADujdhEi1RaUaU39jki89ylK5H5dFyM7hsapjZeRCYAAM0BsYkW\n",

"5ZKtSq/vy9KruzN0viYyw7t00FMTY3Tv0B5EJgAAzQyxiRbhoq1KGz63at3uDF0orZQkRQQ6InPa\n",

"ECITAIDmithEs1ZSXll7JbOwJjIjAzvo6TiTpg4OlTeRCQBAs0ZsolkqLq/Uhr1WrduTqaIyR2RG\n",

"de2op+JiNGUQkQkAQEtBbKJZKS6v1Gt7rFq/J0PF5VWSpKhuHZUYZ9KvBoXKy9PDxRMCAICGIDbR\n",

"LBSVVeq1vZn6x57M2siM7tZRifEm3TOQyAQAoKUiNuFSRaWVWr83U6/tzVRJTWSagjrp6XiTfjkg\n",

"hMgEAKCFIzbhEoWlFVq/J1P/3GtVic0Rmb2DOykx3qTJ/UPkSWQCANAqEJtoUhcu1UTm51ZdrInM\n",

"PsG+Sppk0l23dicyAQBoZYhNNInzlyq0bneGNnxu1aUKuySpb3dfJcWbdCeRCQBAq0VswqnOXbTp\n",

"1d2Zen2fVaU1kdkvxE+J8Sbd0S+YyAQAoJUjNuEU5y7atHZ3ht7Yl1UbmbeG+ikp3qRf9AuWhweR\n",

"CQCAOyA20ajOXrRp7S5HZJZVOiKzfw8/JcX31qRbgohMAADcDLGJRlFQUq61OzP05v4slVdWS5IG\n",

"hvkrKd6kuL5EJgAA7orYxE0pKCnX33dm6F8/isxBYf5aNKm3JvTpRmQCAODmiE3ckILicq3Zma63\n",

"9mfLVuWIzME9A5Q0yaQJvYlMAADg0KDYTExM1IcffqisrCwdOnRIgwcPvmpNWlqa7r77bvXp06f2\n",

"2L59+9S+ffubHhaul19Urld2puutL7NVUROZQ8MDlDSpt8aZuhKZAACgjgbF5v33369nnnlGY8aM\n",

"+cl1ffr00eHDh29mLjQz+UXlWpNm0cYDObWROSyisxZNMmlMDJEJAADq16DYHDdunLPmQDN1qrBM\n",

"a9LS9c6BHFXYHZE5PLKzkuJ7a3RMIJEJAAB+klN+ZjM9PV1Dhw6Vl5eXHn/8cS1YsOCaa202m2w2\n",

"W51jdrvdGWOhAU4WlmlNmkXvHsitjcwRvbpoUbxJo6KJTAAAcH0aPTaHDh2q3Nxc+fv7Kzc3V5Mn\n",

"T1bXrl31wAMP1Lt+2bJlWrp0aZ1jsbGxjT0WrlPuhVKtTkvXe1/lqNJuSJJG9uqiRZN6a1R0oIun\n",

"AwAALY1nYz+gn5+f/P39JUlhYWF66KGHtHv37muuf/bZZ1VUVFTnY8SIEY09Fn5GzvlSPbv5G018\n",

"KU1v7c9Wpd3QqKhAvT0nVu/MHUVoAgCAG9LoVzbz8vIUHBwsT09PlZSUaNu2bZo9e/Y11/v4+MjH\n",

"x6fOMS8vr8YeC9eQc75Uf9th0ftf56qq2nEl8/boQCXFmzQyisAEAAA3p0GxOXfuXH388cfKz8/X\n",

"nXfeKV9fX1ksFiUkJGjKlCmaMmWKNm3apDVr1sjb21tVVVWaMWOGHn/8cWfNjxuUfa5Uq3aYtfng\n",

"ydrIHBPTVUmTTBoe2cXF0wEAgNbCwzAMw9VD/KfFixdr+fLlrh6jVbKevaRVOyzacuik7DWROdbU\n",

"VYsmmTQsgsgEAACNi3cQchOZZy9p1XaLth6+EpnjendTUrxJwyI6u3g6AADQWhGbrVzGmYu1kVnT\n",

"mJrQxxGZQ8KJTAAA4FzEZiuVXhOZH/woMuP6Bikx3qTBPQNcOhsAAHAfxGYrYyko0crtFn105FRt\n",

"ZMbXROYgIhMAADQxYrOVMJ8u0YrtFm375pQu/8rXpFuClRRv0oAwf9cOBwAA3Bax2cKdOF2iFalm\n",

"ffxtXm1k3tEvWInxJvXvQWQCAADXIjZbqO/zi7Uy1aJPjl6JzDtvdUTmraFEJgAAaB6IzRbmeF6x\n",

"VqSa9enR/Npjd/fvrsR4k24J8XPhZAAAAFcjNluIY6cckfk/312JzF8OCNHT8THq253IBAAAzROx\n",

"2cwdPVmkFalm/fvYaUmSh4c0eUCIEuNM6tPd18XTAQAA/DRis5k6erJIL6eYlXL8SmTeMzBUiXEx\n",

"MgUTmQAAoGUgNpuZb3OLlJx6QinHCyQ5InPKoFA9HRejmCAiEwAAtCzEZjNxJKdQyalmbf/eEZme\n",

"NZH5VJxJMUGdXDwdAADAjSE2XexQ9gUlp5qV9sMZSY7InDa4hxbGxSi6G5EJAABaNmLTRQ5mX1By\n",

"ilk7Tzgi08vTQ9MG99BTcTHq1bWji6cDAABoHMRmE/s667xeTjFrt/msJEdk3jukh56aGKNIIhMA\n",

"ALQyxGYTOWA9r+QUs/ZYrkTm9KE9tHBijCICiUwAANA6EZtO9mXmeSWnntBeyzlJkrenh+4fFqaF\n",

"E2PUs0sHF08HAADgXMSmk3yRcU7JKWbty7gSmTNuC9OCCUQmAABwH8RmI9uXfk4vp5zQ/szzkqQ2\n",

"Xh6acVtPLZgQrbDORCYAAHAvxGYjMAzDEZmpZn35o8h8cHhPzZ8Qox4B7V08IQAAgGsQmzfBMAzt\n",

"tZxTcuoJHbBekCS19fKsicxohRKZAADAzRGbN8AwDO2xnNXLKWZ9nVUTmd6eemh4T82bEK0QfyIT\n",

"AABAIjYbxDAM7TKfVXLKCR3MLpTkiMyHR4Rr3vhodfdv59oBAQAAmhli8zoYhqG0E2eUnGLW4ZxC\n",

"SZKPt6ceHumIzGA/IhMAAKA+xOZPMAxDaT+c0cupZh2picx2bTz165ERmjsuSkFEJgAAwE/ybMji\n",

"xMRERUZGysPDQ4cPH77muvXr18tkMik6OlpPPvmkKisrb3bOJmUYhlKPn9bUv+3V4/88oCM5hWrX\n",

"xlMJY3pp1zMTteSefoQmAADAdWhQbN5///3as2ePIiIirrkmMzNTS5Ys0e7du2WxWHT69GmtXbv2\n",

"pgdtCoZhKOXYaU1ZtVezN3ylb3KL1L6Nl+aMi9LuZ+L0h3v6KciXyAQAALheDXoZfdy4cT+75v33\n",

"39eUKVPUvXt3SdK8efP04osvauHChTc2YRMwDEOfHTutFdvNOnqyWJLUoa2XfjMqQk+OjVLXTj4u\n",

"nhAAAKBlavSf2czOzq5z5TMyMlLZ2dnXXG+z2WSz2eocs9vtjT3WNe06cUb//en3OpZ3JTIfHRWp\n",

"J8f2UiCRCQAAcFNc/gtCy5Yt09KlS+sci42NbbKvn3OhVMfyitWxrZdm3R6phLFR6tKxbZN9fQAA\n",

"gNas0WMzPDxc6enptbetVqvCw8Ovuf7ZZ5/V4sWL6xxbsmRJY491TTOG9VRhaaUeHhGuzkQmAABA\n",

"o2rQLwhdj+nTp+vDDz9Ufn6+DMPQK6+8opkzZ15zvY+Pj/z8/Op8eHl5NfZY19TW21MLJ8YQmgAA\n",

"AE7QoNicO3euwsLClJubqzvvvFMxMTGSpISEBH344YeSpKioKC1dulSjR49WTEyMunXrprlz5zb+\n",

"5AAAAGj2PAzDMFw9xH9avHixli9f7uoxAAAAcJMa/WV0AAAA4DJiEwAAAE5DbAIAAMBpiE0AAAA4\n",

"DbEJAAAApyE2AQAA4DTEJgAAAJyG2AQAAIDTEJsAAABwmmb5DkL33XefIiMjm+zr2e12ffnllxox\n",

"YkSTvi97c8e+XBt7Uz/2pX7sy7WxN/VjX66NvamfK/YlIiJCSUlJP7uuWcZmUysuLpa/v7+Kiork\n",

"5+fn6nGaDfbl2tib+rEv9WNfro29qR/7cm3sTf2a877wMjoAAACchtgEAACA0xCbAAAAcBpiU5KP\n",

"j4/++Mc/ysfHx9WjNCvsy7WxN/VjX+rHvlwbe1M/9uXa2Jv6Ned94ReEAAAA4DRc2QQAAIDTEJsA\n",

"AABwGmITAAAATuNWsWk2m3X77berd+/eGj58uL777rt6161fv14mk0nR0dF68sknVVlZ2cSTNq3r\n",

"2Ze0tDS1b99egwcPrv0oKytzwbRNJzExUZGRkfLw8NDhw4evuc7dni/Xsy/u+HwpLy/XtGnT1Lt3\n",

"bw0aNEi/+MUvZLFY6l27bds29e3bVyaTSffdd5+Ki4ubeNqmdb17Y7Va5eXlVed5k56e7oKJm84d\n",

"d9yhgQMHavDgwRo7dqwOHTpU7zp3O89I17c37niuuey1116Th4eHtm7dWu/9zeo8Y7iRiRMnGq+9\n",

"9pphGIbx3nvvGbfddttVazIyMoyQkBAjLy/PqK6uNn71q18Zq1atauJJm9b17MuOHTuMQYMGNe1g\n",

"LrZz504jJyfHiIiIMA4dOlTvGnd8vlzPvrjj86WsrMz4+OOPjerqasMwDGPlypXG+PHjr1pXUlJi\n",

"BAUFGcePHzcMwzAWLlxo/O53v2vKUZvc9e5NZmam4e/v37TDudiFCxdq/7x582Zj4MCBV61xx/OM\n",

"YVzf3rjjucYwHP+tjBo1yoiNjTW2bNly1f3N7TzjNlc2CwoK9NVXX+mRRx6RJE2fPl05OTlX/d/1\n",

"+++/rylTpqh79+7y8PDQvHnztHHjRleM3CSud1/c0bhx4xQWFvaTa9zt+SJd3764o3bt2mny5Mny\n",

"8PCQJMXGxspqtV617tNPP9WQIUPUt29fSdKCBQta/XPmevfGHQUEBNT+uaioqHaPfswdzzPS9e2N\n",

"O6qurlZCQoJWrlx5zX/mqLmdZ9wmNnNychQSEiJvb29JkoeHh8LDw5WdnV1nXXZ2tiIiImpvR0ZG\n",

"XrWmNbnefZGk9PR0DR06VMOHD9fq1aubetRmyd2eLw3h7s+X5ORkTZ069arj9T1n8vLyVFVV1ZTj\n",

"udS19kaSLl26pOHDh2vo0KF64YUXZLfbm3i6pvfoo4+qZ8+eWrJkid54442r7nfn88zP7Y3kfuea\n",

"5cuXa/To0Ro2bNg11zS384y3S74qWpyhQ4cqNzdX/v7+ys3N1eTJk9W1a1c98MADrh4NzZC7P19e\n",

"fPFFWSwWpaamunqUZuen9iYkJEQnT55UUFCQzp8/rwcffFB//etf9cwzz7hg0qbz+uuvS5I2bNig\n",

"3//+9/rkk09cPFHz8XN7427nmqNHj2rTpk3atWuXq0dpELe5stmzZ886VW8YhrKzsxUeHl5nXXh4\n",

"uLKysmpvW63Wq9a0Jte7L35+fvL395ckhYWF6aGHHtLu3bubfN7mxt2eL9fLnZ8vL730kjZv3qxP\n",

"P/1UHTp0uOr++p4zP351oTX7ub3x8fFRUFCQJKlLly564okn3OZ5I0mzZs3Sjh07dO7cuTrHOc9c\n",

"e2/c7Vyze/duWa1WmUwmRUZG6osvvtCcOXO0Zs2aOuua23nGbWIzKChIQ4cO1ZtvvilJ2rRpk8LC\n",

"whQTE1Nn3fTp0/Xhhx8qPz9fhmHolVde0cyZM10xcpO43n3Jy8tTdXW1JKmkpETbtm3TkCFDmnze\n",

"5sbdni/Xy12fL8uXL9fGjRv12Wef1fl5sx+76667dPDgQX3//feSpNWrV7vFc+Z69qagoKD2t6xt\n",

"Nps2b97cqp83hYWFOnXqVO3trVu3KjAwUF26dKmzzh3PM9e7N+52rpk/f77y8vJktVpltVoVGxur\n",

"tWvXav78+XXWNbvzjMt+NckFvv/+eyM2NtYwmUzGsGHDjG+++cYwDMOYPXu28cEHH9SuW7t2rREV\n",

"FWVERUUZTzzxhFFRUeGqkZvE9ezLypUrjX79+hkDBw40+vXrZ/zxj3+s/c3S1mrOnDlGjx49DC8v\n",

"LyMoKMiIjo42DIPny/Xsizs+X3JycgxJRlRUlDFo0CBj0KBBxogRIwzDMIwlS5YYa9asqV37wQcf\n",

"GH369DGio6ONqVOnGoWFha4au0lc795s2rTJuPXWW2ufN0899ZRRXl7uytGdymq1GsOHDzf69+9v\n",

"DBw40IiPj6/9Fx7c/TxzvXvjjueaHxs/fnztb6M35/MM740OAAAAp3Gbl9EBAADQ9IhNAAAAOA2x\n",

"CQAAAKchNgEAAOA0xCYAAACchtgEAACA0xCbAAAAcBpiEwAAAE5DbAIAAMBpiE0AAAA4DbEJAAAA\n",

"p/l/XBGOKIA6zdwAAAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-8df302c6-ffa6-40be-a3c1-ebf2ded91e9f\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-8df302c6-ffa6-40be-a3c1-ebf2ded91e9f\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_9['Height(Inches)'].plot(kind='line', figsize=(8, 4), title='Height(Inches)')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-afa9656d-53d1-4ec1-9ede-6773df58f60a\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAABHnElEQVR4nO3dd3hUdfo28PvMTHovpDcSAiGUACEhlNACCggKqKAQUUEUBcFV\n",

"V8WfvuqqoLurbgBpiooGlSoqgkgnlBB6h5Dee2+Tdt4/JkQCCSRhkjPl/lzXXAszZ06eOTtObp75\n",

"nvMIoiiKICIiIiJSA5nUBRARERGR7mC4JCIiIiK1YbgkIiIiIrVhuCQiIiIitWG4JCIiIiK1Ybgk\n",

"IiIiIrVhuCQiIiIitWG4JCIiIiK1YbgkIiIiIrVhuCQinbZkyRI88MADrd7+4MGDEAQBtbW1bf5Z\n",

"NTU16NOnD2JiYtr83Nb47rvv4Obm1iH7BoBJkybhu+++67D9E5F+YLgkIo01cuRIvPPOO3fc/8wz\n",

"zyA8PLxV+3j77bfx119/dUpdq1atgo+PD4KDgwEASUlJEAQBcXFxav35HeWjjz7Cm2++icrKSqlL\n",

"ISItxnBJRKQG9fX1+OKLL/D8889LXUq7BQQEwNPTE5GRkVKXQkRajOGSiLRaVVUV3n77bfj4+MDG\n",

"xgbDhw/H2bNnGx9///33MWzYsMa/Z2dnY/LkybC2toa3tzc2bNgAQRBw8ODBJvvdvn07unfvDgsL\n",

"C4wdOxbp6ekAgHnz5iEqKgr//ve/YW5uDnNzcwDAmTNnkJGRgVGjRrVY682v3Lds2dLsvgGgsrIS\n",

"77zzTuPj3t7eWL9+fZP9rFmzBl5eXrCyssLjjz+OkpKSxseKiorw4osvwtPTE3Z2dpgwYQISEhIa\n",

"H9+0aRN69eoFS0tL2NvbY8yYMU32PW7cOGzbtu1eh52IqEUMl0Sk1ebNm4eYmBgcOnQIubm5mDZt\n",

"Gh588EEUFRU1u/2MGTNQV1eHxMREnD59Gps2bWp2u19++QUnT55EWloaKioq8PbbbwMAVq9ejdDQ\n",

"ULzxxhsoKytDWVkZAODUqVPw9vaGiYnJPWtuad8AMHfuXPz111/49ddfUVJSgiNHjqBPnz6Nj2dl\n",

"ZeHatWu4evUqrl27hnPnzuGzzz4DAIiiiClTpqCkpARnz55FRkYG+vTpg4kTJ6KmpgYVFRUIDw/H\n",

"8uXLUVJSgrS0tCY/GwD69u2LkydP3vM1EBG1hOGSiDTaf//7X1hbWze5/fjjjwCA/Px8rF+/Hl9+\n",

"+SXc3NygUCiwYMECWFlZYceOHXfsKy0tDfv378enn34KGxsb2NjY4OOPP2725y5duhRWVlawsrLC\n",

"jBkz7nmSTkFBAaysrFr1mlrad15eHjZs2ICVK1eiZ8+eEAQBLi4uGDBgQONzFQoF/v3vf8PExATO\n",

"zs6YPHly4/PPnj2Lo0ePYs2aNbC1tYWRkRGWLFmCxMREnDhxAgBgYGCAq1evIi8vD8bGxhg9enST\n",

"2qysrFBYWNiq10FE1ByGSyLSaK+//jqKioqa3GbMmAEAjSfKDBo0qEn4TE9PR1pa2h37uvn1s6en\n",

"Z+N9Xl5ezf5cFxeXxj+bmZmhtLT0rnXa2tqiuLi4Va+ppX0nJiYCAHr06NHic+3t7WFgYNDs82/c\n",

"uIHa2lq4ubk1Hgs7OzsAQGpqKkxNTfHnn39i79696NGjB/r06YOIiIgm+y8uLoaNjU2rXgcRUXMU\n",

"UhdARNReTk5OAIALFy7Aw8Pjntu7uroCAJKTk+Hv79/457aSye78d3lgYCASEhJQVVUFY2PjNu8T\n",

"+DvoxsbGIjAwsM3Pd3JygqGhIXJzc5sE0FuFhoYiNDQUoiji0KFDGDduHPz9/TF27FgAwMWLFzFw\n",

"4MB21U9EBLBzSURazNPTE5MnT8b8+fMbQ2JpaSl27dqFzMzMO7Z3c3PDyJEjsXjx4sYuaHOXFLoX\n",

"JycnxMbGNrkvMDAQzs7OOHDgQPteDIAuXbrgySefxPz583H9+nUAQGZmJs6cOdOq5w8bNgy9e/fG\n",

"iy++iJycHABAYWEhtm7dioqKCmRlZWHz5s0oKiqCIAiwtraGIAhQKP7uM/z555+YMmVKu18DERHD\n",

"JRFptR9//BGBgYEYO3YsLCws0KNHD3z11VcQRbHF7UVRhKenJ/r374+HH34YANrUbXzttddw/fp1\n",

"2NjYwNraGoCqm/nKK69gzZo19/V6vvrqK4wYMQLjx4+Hubk5hg4disuXL7fquXK5HHv27IGpqSkG\n",

"DRoECwsLBAQE4JdffoEgCBBFEatXr4a3tzfMzc3x2GOP4eOPP248w/3ChQtITEzEU089dV+vgYj0\n",

"myC29AlMRKQHzp07h/79+yMjIwPOzs73ta+amhr0798f33zzTeOF1LXJww8/jClTpuDZZ5+VuhQi\n",

"0mIMl0SkVy5duoTq6mr069cPGRkZmDVrFgBg//79EldGRKQb+LU4EemV4uJiPPHEE7CwsEBgYCDs\n",

"7e2xYcMGqcsiItIZ7FwSERERkdqwc0lEREREasNwSURERERqw3BJRERERGrDcElEREREaqMx4fL2\n",

"+bZEREREpH00Jly2Z74vEREREWkWjQmXRERERKT9GC6JiIiISG0YLomIiIhIbRguiYiIiEhtGC6J\n",

"iIiISG0YLomIiIhIbRguiYiIiEhtGC6JiIiISG0YLomIiIhIbRguiYiIiEhtGC6JiIiISG0UUhdA\n",

"pOnq6kX8e/c1yAUBL4/2hYmhXOqSiIiINBbDJdE9/HExE2sOJQAA9lzJxvIZ/eHnZClxVURERJqJ\n",

"X4sT3UVdvYiIvbEAAIVMwI2cMjyy4ig2nEiGKIoSV0dERKR5GC6J7mLHhQzE55bD0liBva+OwMge\n",

"XaCsrcf//XIJ8388g+LKGqlLJCIi0igMl0QtqKsXEbHvBgBgbqg3vOzN8M3TQfi/CT2hkAnYeTEL\n",

"EyKicCalUOJKiYiINAfDJVELfj+fgYTcclibGuCZoV4AAJlMwNzh3tjy4hB42JoivagSj68+jlUH\n",

"41Ffz6/JiYiIGC6JmlFbV49lt3QtLYwNmjzez90aOxYOw8S+zqirF/Hpn9fw9LcxyCmtkqJcIiIi\n",

"jcFwSdSM385nICFP1bWcNdiz2W0sjQ2w/Mn++PTRPjA2kCHqRh4mREThcGxuJ1dLRESkORguiW5z\n",

"r67lrQRBwPQgD/y+YBj8nCyQV1aNWd/E4JNd11BTV99ZJRMREWkMhkui22w/l4Gk/ArYmBrg6SFe\n",

"rXqOr6MFts8fivAQDwDA6kPxeHz1caQWVHRgpURERJqH4ZLoFrV19Vi+X9W1fH64D8yNWj9nwNhA\n",

"jo8m98GqmQNgaazAudQiTIiIwh8XMjuqXCIiIo3DcEl0i1/OpiM5vwK2ZoYtrrW8l/F9nLFzUSgG\n",

"eFijVFmL+T+eweJtF1FZXafmaomIiDQPwyVRg5q6eizfHwcAeGG4N8za0LW8nZuNKTa+MBjzR/lA\n",

"EICfYlLwyJdHEJtdqq5yiYiINBLDJVGDX86kI6WgAnZmhniqnV3LWxnIZfjng374YfYgdLEwQmx2\n",

"GSYtP4KfYlI4OpKIiHQWwyURGrqWB1RrLV8Y4Q1Tw/Z3LW83zNceOxeGYnh31ejIxdsuYsFPZ1FS\n",

"xdGRRESkexguiQBsPZ2G1IJK2JsbIjzk/ruWt+tiYYTvngnC4vF+UMgE/HEhExMionCWoyOJiEjH\n",

"MFyS3quurceKA6q1lvNG+Ki1a3krmUzACyN8sHneYLjZmCCtUDU6cvUhjo4kIiLdwXBJem/rmTSk\n",

"FVbC3twIMwepv2t5u/4eNti5KBQP9XVGbb2IT3apRkfmlio7/GcTERF1NIZL0mvVtfVY0XCG+Isj\n",

"fWBiKO+Un2tpbIAVT/bHJ1P/Hh05PiIKUTc4OpKIiLQbwyXptc2nU5FeVIkuFkaYOcijU3+2IAh4\n",

"ItgDvy0Yhu6O5sgrU2LWNzH49E+OjiQiIu3FcEl6S1lbhy9vdi1H+MDYoHO6lrfr7miB3xYMw8xB\n",

"HhBFYNXBeExbw9GRRESknRguSW9tOpWGjOIqOFgYYUYndy1vZ2wgx8dT+mDlzAGwMFbgbEoRJiyL\n",

"ws6LHB1JRETaheGS9JKytg4rG84Qf2mkdF3L203o44ydC0PR38MapVW1eGnDGbz9y0VU1XB0JBER\n",

"aYc2hcv8/Hz069ev8da9e3coFAoUFBRgyZIl6NGjB2QyGbZv395B5RKpx6aTqcgsroKTpTGeCJa2\n",

"a3k7d1tTbHphMF4cqRod+eOJFDyy4ihHRxIRkVZoU7i0s7PDuXPnGm/PP/88xo8fD1tbW4wZMwa7\n",

"du3C8OHDO6pWIrWoqqnDlwfiAQAvjdKcruWtDOQyvDnOD9/PDoa9uSGuZ5fi4RVH8DNHRxIRkYa7\n",

"r6/F161bhzlz5gAAgoOD4e3t3arnKZVKlJSUNLnV1fFrP+ocG0+mIqtE1bWcNtBd6nLuKtS3C3Yu\n",

"CkWorz2qaurx1raLeJmjI4mISIO1O1weO3YMhYWFmDhxYpufu3TpUlhZWTW5xcTEtLcUolarqqnD\n",

"yoOqtZbzNbRreTsHC2OsfzYYbzWMjtxxIRMPLYvCudQiqUsjIiK6Q7vD5bp16zBr1iwoFG0flbd4\n",

"8WIUFxc3uQUHB7e3FKJW+ykmBdklSrhYGWNakGZ3LW8lkwmYN8IHmxpGR6YWVOKxVcewhqMjiYhI\n",

"w7QrXJaVlWHTpk2YPXt2u36okZERLC0tm9zkcs3vIJF2q6qpw6qDN9dadoORQvvecwM8bPDHwlA8\n",

"1Ec1OnLprmt45ruTyCvj6EgiItIM7QqXGzduREBAAPz8/NRdD1GH+fFECnJKlXC1NtH4tZZ3Y2Vi\n",

"gBUz+mPJlD4wUshwODYX4yOicORGntSlERERtS9c3noiz00fffQR3NzccPz4cTz33HNwc3NDbi7n\n",

"JJNmqKqpw6pDqq7l/FHdYKjQ7ku8CoKAGYP+Hh2ZW6rEU9+cwH92c3QkERFJSxA15Lomr776Kj7/\n",

"/HOpyyAd9XVUAj764ypcrU1w4PWRWh8ub1VZXYd/7biCn2JSAAADPKyx7Mn+cLMxlbgyIiLSR7rz\n",

"G5aoBZXVdVh9KAEAsGC09nctb2diKMfSqX3w5YwBsDBS4ExKESZERGEXR0cSEZEEdOu3LFEzIqOT\n",

"kVemhJuNCR4LdJO6nA7zUF9n7FwUin7u1iipqsWLG87gne0cHUlERJ2L4ZJ0WkV1LdYcVq21fHl0\n",

"NxjIdfst725ris3zBmPeCB8AQGR0CiZ/eRRxORwdSUREnUO3f9OS3lN1LavhYWuKqQN0t2t5KwO5\n",

"DG+N98P6htGR17JKMWn5UWw6mcrRkURE1OEYLklnVVTXYs0tay11vWt5uxHdVaMjh3WzR2VNHd7Y\n",

"egGLfj6HUo6OJCKiDqRfv21Jr3x/PBn55aqu5ZT+rlKXIwkHC2N8PzsYb4zrAblMwG/nM/DQsiM4\n",

"z9GRRETUQRguSSeVK2ux9rCqa6kPay3vRiYT8NLIbtj0wmC4WpsgpaACj646hq8OJ3B0JBERqZ3+\n",

"/sYlnbb+eBIKyqvhZae/XcvbBXraYOeiUIzv7YTaehEf77yK2es5OpKIiNSL4ZJ0TpmyFl81di19\n",

"odDjruXtrEwMsHLmAHw8pTeMFDIcvJ6LCRFROBbH0ZFERKQe/K1LOmf9sSQUVtSgq70ZHunnInU5\n",

"GkcQBMwc5IlfFwxFNwdz5JQqMXPdCfx393XUcnQkERHdJ4ZL0imlVTX4KkrVtVwY1o1dy7vwc7LE\n",

"7wuG4clgd4gisOJAHJ5YG430okqpSyMiIi3G37ykU9YfS0JRRQ287c0wqS+7lveiGh3ZF8uf7A8L\n",

"IwVOJRdi/P8O489LWVKXRkREWorhknRGSVUNvopKBAAsDONay7aYFOCCPxaGIsDNCiVVtZgXeRrv\n",

"br/E0ZFERNRm/O1LOuO7o0korqyBTxczTApg17KtPOxMsXneELww3BsA8EN0csPoyDKJKyMiIm3C\n",

"cEk6oaSqBl83rrX0hVwmSFyRdjJUyLB4Qk9892wQ7Mxujo48gk2nODqSiIhah+GSdMK3R5JQUlWL\n",

"bg7mmMi1lvdtZA8H7FoUiqHd7FSjI7dcwCsbOTqSiIjujeGStF5xZQ2+PqLqWi5i11JtHCyN8f3s\n",

"Qfjng6rRkb+ey8DE5UdwIa1I6tKIiEiDMVyS1vvmSCJKq2rh62COCX2cpS5Hp8hlAuaP6oZNL4TA\n",

"1doEyfmq0ZFfR3F0JBERNY/hkrRacUUNvjmiOkN80Rh2LTtKoKctdi4MxbheTqipE/HRH1cxZ/1J\n",

"5HN0JBER3YbhkrTauiMJKFXWooejBSb0ZteyI1mZGmBV+AB8OLk3DBUyHLiei/ERUTgWz9GRRET0\n",

"N4ZL0lpFFdX49mgSAFXXUsauZYcTBAFPhXji1/m3jI78+gQ+/4ujI4mISIXhkrTWuiOJKFXWws/J\n",

"AuN6OUldjl7p6WyJ3xYMxfSBqtGRy/bH4cmvODqSiIgYLklL3dq1fIVdS0mYGirw6WN9EfFEP5gb\n",

"KXAyqRATIqKw+zJHRxIR6TOGS9JKX0UloKyha/mAP7uWUnqknyv+WDgMfd2sUFxZgxd+OI33fuXo\n",

"SCIifcVwSVqnoLwa3zV2Lbuza6kBPO3MsGXeEMwN7QoAWH88GVNWHkN8LkdHEhHpG4ZL0jpfRSWg\n",

"vLoO/s6WeLCXo9TlUANDhQz/95A/vn02CLZmhriaWYJJy49gy+k0jo4kItIjDJekVQrKq7H+WBIA\n",

"1VpLQWDXUtOMahgdOcTHDhXVdXh983m8uuk8ypS1UpdGRESdgOGStMrawwmoqK5Db1dLjPVn11JT\n",

"OVoa44c5g/D6A90hlwn45Ww6Ji6LwsW0YqlLIyKiDsZwSVojv0yJ748nAQBeCevOrqWGk8sELBjt\n",

"i43Ph8DFyhhJ+RWYuuoo1h1J5NfkREQ6jOGStMbNrmUfVyuE9XSQuhxqpYFetti5KBQP9nJETZ2I\n",

"D3dcwXPrT6GgvFrq0oiIqAMwXJJWyCtT4vvjyQC41lIbWZsaYnV4ID58pBcMFTLsu5aD8RGHcTw+\n",

"X+rSiIhIzRguSSusORSPypo6BLhZYbQfu5baSBAEPDXYC9tfGgrvLmbILlFixtfR+HxPLEdHEhHp\n",

"EIZL0ni5pUr8EH2za8m1ltrO38USO14ehscD3VSjI/fdwIyvTiCDoyOJiHQCwyVpvDWH4lFVU49+\n",

"7tYY2aOL1OWQGpgaKvCfxwPwv+n9YGYoR0xSASYsi8KeK9lSl0ZERPeJ4ZI0Wk5pFSJPcK2lrprc\n",

"3xV/LAxFH1crFFXUYO73p/D+b5ehrOXoSCIibcVwSRpt9cGExq7liO7sWuoiL3szbH1xCJ4bphod\n",

"+d2xJExdeQwJHB1JRKSVGC5JY+WUVGFDQ9fyH2O51lKXGSpkeGeiP755ZiBszQxxOaMEE5cfwdbT\n",

"aVKXRkREbcRwSRpr5cF4KGvrMcDDGsN97aUuhzrBaD9H7FwYihBvW1RU1+G1zefx6sZzHB1JRKRF\n",

"GC5JI2WXVOHHmBQA7FrqGycrY2x4LgSvje0OmQBsO5uOScuP4FI6R0cSEWmDNoXL/Px89OvXr/HW\n",

"vXt3KBQKFBQUICcnB+PGjYOvry969+6Nw4cPd1TNpAdWHYxHdW09BnraYFg3di31jVwm4OUwX/z8\n",

"/GA4WxkjMa8cU1cewzccHUlEpPHaFC7t7Oxw7ty5xtvzzz+P8ePHw9bWFm+99RZCQkJw48YNfPvt\n",

"t5gxYwZqamo6qm7SYVnF7FqSSnBXW+xaFIqx/o6orqvHv3ZcwdzvOTqSiEiT3dfX4uvWrcOcOXMA\n",

"AJs2bcK8efMAAEFBQXBxccGhQ4fuv0LSOysPxqG6th5BXjYY4mMndTkkMWtTQ6x9KhAfPNwLhnIZ\n",

"9l7NwYSIKEQncHQkEZEmane4PHbsGAoLCzFx4kTk5+ejpqYGTk5OjY97eXkhJSWl2ecqlUqUlJQ0\n",

"udXV8bp2BGQUVeLnmFQAwD84jYcaCIKAp4d44Zf5Q+Btb4askirM+CoaX+yJRV09vyYnItIk7Q6X\n",

"69atw6xZs6BQKNr83KVLl8LKyqrJLSYmpr2lkA5ZeTAO1XX1CO5qi8HsWtJterlY4feXh+HRAW6o\n",

"F4GIfTfw5FfRyCzm6EgiIk3RrnBZVlaGTZs2Yfbs2QBUazEVCgWysrIat0lKSoKHh0ezz1+8eDGK\n",

"i4ub3IKDg9tTCumQjKJKbDzJriXdnZmRAp9NC8AX0wNUoyMTCzAhIgr7rnJ0JBGRJmhXuNy4cSMC\n",

"AgLg5+fXeN/jjz+O1atXAwBOnjyJ9PR0jBgxotnnGxkZwdLSsslNLpe3pxTSIV8eiENNnYgQb3Yt\n",

"6d6m9HfDjoWh6O1qicKKGsxZfwof/M7RkUREUmtXuLz1RJ6bPv30Uxw7dgy+vr545plnEBkZCQMD\n",

"A7UUSbovrbACm06pupavjOkucTWkLbo2jI6cPVQ1OvLbo6rRkYl55RJXRkSkv9q+YBKqk3lu5+jo\n",

"iL/++uu+CyL99OWBeNTUiRjsbYcQb3YtqfWMFHL8v0n+GNrNDq9vPq8aHbksCh9N6Y0p/d2kLo+I\n",

"SO9wQg9JLrWgApsbupb/GMuuJbVPWE9H7Fo0HIO62qK8ug7/2Hger246h3KOjiQi6lQMlyS5Lw/E\n",

"obZexNBudgjuait1OaTFnKyM8ePcEPxjTMPoyDMcHUlE1NkYLklSqQUV2HI6DYDqDHGi+yWXCVg0\n",

"xhc/zQ2Bs5UxEhpGR353lKMjiYg6A8MlSWrFflXXMtTXHgO92LUk9RnkbYedC0MxpqdqdOT7v1/B\n",

"3O9Po5CjI4mIOhTDJUkmJb8CW86oupavjPGVuBrSRTZmhvhqViDem+TfMDoyGxOWReEER0cSEXUY\n",

"hkuSzPL9N1DX0LUM9GTXkjqGIAh4dmhXbHtpCLramyGzuApPfhWNiL03ODqSiKgDMFySJJLyyrHt\n",

"bDoAniFOnaO3q2p05NQBrqgXgS/2xmLm19HIKq6SujQiIp3CcEmSWL4/DnX1IkZ074IBHjZSl0N6\n",

"wtxIgc+n9cNnjwfA1FCO6IQCjI84jP3XODqSiEhdGC6p0yXllWP7OXYtSTqPBrphx8vD0MtFNTpy\n",

"9nen8OGOKxwdSUSkBgyX1OmWNay1HNWjC/q5W0tdDukp7y7m2PbSEDw71AsAsO5IIh5bdRxJHB1J\n",

"RHRfGC6pUyXklmF7w1pLzhAnqRkp5HhvUi98NWsgrE0NcDG9GA8ti2p8jxIRUdsxXFKnWr4/DvUi\n",

"MNrPAQHsWpKGGOvviF2LQhHcMDrylY3n8Prm8xwdSUTUDgyX1Gnic8vw67mbXUte15I0i7OVCX6a\n",

"G4JXxvhCJgBbTqdh0oojuJzB0ZFERG3BcEmdZtm+G6gXgTE9HdDXzVrqcojuIJcJeGVMd/w4NwSO\n",

"lkZIyC3HlJXHsP5YEkdHEhG1EsMldYq4nDL8dj4DANdakuYL8bbDrkXDEebngOraerz322U8/8Np\n",

"FFVwdCQR0b0wXFKnWLbvBkRRtbatt6uV1OUQ3ZOtmSG+fnog/t9EfxjIBey5ko0JEVE4mVQgdWlE\n",

"RBqN4ZI63I3sUvx+QdW1XBTGtZakPQRBwOxhXbHtxaHwsjNFRnEVpq85juX7ODqSiKglDJfU4SIa\n",

"upYPsGtJWqqPmxV2LAzFlP6q0ZGf7YlF+NcnkF3C0ZFERLdjuKQOFZtdij8uZgLgWkvSbuZGCnwx\n",

"/e/RkccT8jE+IgoHruVIXRoRkUZhuKQOFbFX1bUc18sJ/i6WUpdDdN8eDXTD7y8Pg7+zJQrKq/Hs\n",

"dyfx0Y4rqK6tl7o0IiKNwHBJHeZ61t9dy0W8riXpEJ+G0ZHPDPECAHx9JBGPrT7G0ZFERGC4pA4U\n",

"sS8WADChjxN6OrNrSbrF2ECO9x/uhbVPBcLa1AAX0ooxcfmRxkEBRET6iuGSOsTVzBLsvJgFAFgU\n",

"xrWWpLse6OWEnQtDEexlizJlLRb9fA7/3HweFdUcHUlE+onhkjpExN4bAICH+jijh5OFxNUQdSwX\n",

"axP8OHcQFob5QhCAzafTMGn5EZxNKZS6NCKiTsdwSWp3OaMYf17OgiBwrSXpD4VchlfHdseG5wbB\n",

"0dII8Q2jIx/58ig2n0pFVU2d1CUSEXUKhktSu1u7lt0d2bUk/TLExx67Fg3H1AGuMJALOJ9ahH9u\n",

"uYBBS/bhwx1XkJBbJnWJREQdiuGS1OpSejH+upKt6lpyGg/pKVszQ3w+rR+OLw7DG+N6wM3GBMWV\n",

"NVh3JBGjPzuEGV9FY+fFTNTU8fJFRKR7FFIXQLolYp+qazmprwt82bUkPWdvboSXRnbDC8N9cDg2\n",

"F5HRydh/PQfH4vNxLD4fDhZGeCLIHU8O8oCzlYnU5RIRqQXDJanNpfRi7GnoWi5k15KokVwmYJSf\n",

"A0b5OSCtsAI/xaRg48lU5JQqsWx/HFYciENYT0eEh3gitJs9ZDJB6pKJiNqN4ZLU5n97Vde1fDjA\n",

"Bd0czCWuhkgzudmY4p8P+mFRWHf8dSULkdHJiE4owJ4r2dhzJRuedqaYEeyBxwe6w9bMUOpyiYja\n",

"jOGS1OJCWhH2Xs2BjF1LolYxVMgwsa8LJvZ1QVxOKSKjU7D1TBqS8yuwdNc1fLYnFg/1cUZ4iAcG\n",

"eNhAENjNJCLtwHBJavG/hjPEH+nnCp8u7FoStUU3Bwu8/3AvvDGuB34/n4HI6BRcTC/GL2fT8cvZ\n",

"dPg5WWBmiCem9HeFuRE/tolIs/FTiu7b+dQi7L+m6lq+PLqb1OUQaS1TQwWmB3lgepAHzqcWITI6\n",

"Gb9fyMC1rFK8u/0SPtl5FZP7uyI8xJMjVYlIYzFc0n27udZycn9XeLNrSaQWAe7WCHC3xjsP+WPr\n",

"mTREnkhGQm45NpxIwYYTKQj0tEF4iAfG93aGsYFc6nKJiBoxXNJ9OZtSiAPXcyGXCVg4mmstidTN\n",

"ytQAs4d1xbNDvXA8IR8bolOw+3IWTicX4nRyIf71+xVMG+iOGYM84GlnJnW5REQMl3R/bq61nNzP\n",

"FV72/MVG1FEEQcAQH3sM8bFHTkkVNp5MxU8xKcgorsKawwlYczgBw7t3wcxBHgjzc4BCzhkZRCQN\n",

"hktqt9PJhTgU29C1DONaS6LO4mBpjJfDfPHiSB8cuK66OPvhG7k4HKu6OVsZ44kgDzwR7A5HS2Op\n",

"yyUiPcNwSe12c63l1P6u/DqOSAIKuQxj/R0x1t8RKfkV2BCTjM2n0pBZXIUv9sZi+f4bGOuvujj7\n",

"EB87Xs6IiDoFwyW1y+nkAkTdyINCJuBlrrUkkpyHnSkWj++JV8d2x5+XVBdnP5lUiF2XsrDrUha8\n",

"7c0wY5AHHgt0g7UpL85ORB2H4ZLa5eZay0cHuMHDzlTiaojoJiOFHI/0c8Uj/VxxLasEG6JT8MvZ\n",

"dCTkleOjP67iP7uvY1KAC8JDPBHgZsVuJhGpXZtXfCuVSixYsAC+vr7o06cPwsPDAQB//vknBg4c\n",

"iL59+yIkJATnz59Xe7GkGU4l/d21XMDrWhJpLD8nS3w4uTei3w7Dx1N6o6ezJZS19dhyOg2TvzyK\n",

"SSuO4OeYFFRU10pdKhHpkDZ3Lt966y0IgoDY2FgIgoCsrCwUFhZi5syZOHz4MHr16oWoqCjMnDkT\n",

"ly5d6oiaSWJfNKy1fCzQDe627FoSaTpzIwVmDvLEjGAPnEkpwoboZOy4mIlL6SV4a9tFfPzHVUwd\n",

"oLo4u6+jhdTlEpGWE0RRFFu7cXl5OZydnZGWlgZLy7+nQ5w6dQozZsxAbGxs432WlpY4ePAgBgwY\n",

"0Kp9v/rqq/j888/bUDpJISaxANPWHIdCJuDA6yMZLom0VGF5NbacTsOGE8lIyq9ovD+4qy3CQzwx\n",

"rpcTDBW8nBERtV2bPjni4+Nha2uLJUuWYODAgQgNDcW+ffvg6+uL/Px8HDt2DADw22+/obS0FElJ\n",

"Sc3uR6lUoqSkpMmtrq7uvl8Mdbwv9qj+AfH4QHcGSyItZmNmiLnDvbH/tZH4YU4wHuzlCLlMQExi\n",

"ARb+dBZDPtmHf/95DakFFffeGRHRLdr0tXhtbS2Sk5Ph7++PTz75BGfPnsXYsWNx+fJlbNmyBYsX\n",

"L0ZZWRkGDx4Mf39/KBTN737p0qX44IMPmtwXEhLS/ldBnSI6IR/HE/JhIOdaSyJdIZMJCPXtglDf\n",

"LsgsrsTPMan4+WQKskuUWHkwHqsOxWNUDweEh3hgRHcHyGU8AYiI7q5NX4vn5eXB0dER1dXVkMtV\n",

"s2yDgoKwdOlSjBkzpnE7pVIJJycnnDx5Et263RlClEollEplk/veffddREREtPd1UCd4Yu1xRCcU\n",

"YOYgD3w8pY/U5RBRB6mpq8e+q9mIjE7Bkbi8xvtdrU0wY5AHpg10RxcLIwkrJCJN1qavxe3t7REW\n",

"Fobdu3cDABITE5GYmIiePXsiMzOzcbsPP/wQo0ePbjZYAoCRkREsLS2b3G6GVdJMx+PzEZ1QAAO5\n",

"gPmj2LUk0mUGchnG9XZG5HODcOD1kXhuWFdYmRggvagS/9l9HUM+2YcFP55BdEI+2tCfICI90eaz\n",

"xVevXo05c+bgzTffhEwmw5o1a+Dq6oq5c+ciKioKtbW1GDx4MNatW9cR9ZIERFFsPEN8epA7XKxN\n",

"JK6IiDpLV3szvDPRH68/2AM7LmRiw4lknE0pwo4LmdhxIRO+DuaYOcgDUwPdYGlsIHW5RKQB2vS1\n",

"eEfi2eKa61hcHmZ8fQKGchkOvTESzlYMl0T67FJ6MTacSMGv59JRUa06GdPEQI5H+qkuzt7b1Uri\n",

"ColISpzQQ3d1a9fyiWB3BksiQm9XKyyd2geLJ/hh+9l0REYnIza7DD+fTMXPJ1MR4G6N8EEemNjX\n",

"BSaGXPJEpG8YLumujsXn42RSIQwVMrw0kmstiehvlsYGmDXYC0+FeOJkUiEio5Ox61ImzqcW4Xxq\n",

"ET7ccQWPBbpjZogHfLqYS10uEXUShktqkSiKjde1nBHsAScrY4krIiJNJAgCgrvaIrirLfLK/LHp\n",

"VCp+PJGCtMJKfHM0Ed8cTcQQHzuEh3hirL8jDOS8ODuRLmO4pBYdicvDqWRV1/LFkT5Sl0NEWsDe\n",

"3AgvjeyGecN9cOhGLjZEJ2P/tRwci8/Hsfh8OFgY4YkgdzwR7MGTA4l0FMMlNev2rqWjJbuWRNR6\n",

"MpmAUT0cMKqHA9IKKxouzp6KnFIllu2Pw4oDcQjr6YjwEE+EdrOHjBdnJ9IZDJfUrMM38nAmpQhG\n",

"ChleYteSiO6Dm40pXn+wBxaG+eKvK1mIjE5GdEIB9lzJxp4r2fC0M8WMYA88PtAdtmaGUpdLRPeJ\n",

"4ZLucGvXcuYgTziwa0lEamCokGFiXxdM7OuCuJxSREanYOuZNCTnV2Dprmv47K9YTOjjhPAQTwR6\n",

"2kAQ2M0k0kYMl3SHQ7G5OJdaBGMDGeaN9Ja6HCLSQd0cLPD+w73wxrge+P18BiKjU3AxvRjbz2Vg\n",

"+7kM+DlZYGaIJ6b0d4W5EX9VEWkT/hdLTaiua3kDABA+yBMOFuxaElHHMTVUYHqQB6YHeeBCWhEi\n",

"o5Px2/kMXMsqxbvbL+GTnVcxub8rwkM80dPZUupyiagVGC6piYPXc3G+oWv5wgiutSSiztPXzRr/\n",

"fswa/zfBH1vPpCHyRDIScsux4UQKNpxIQaCnDcJDPDC+tzOMDXhxdiJNxXBJjW6dxvNUiCe6WBhJ\n",

"XBER6SMrUwPMHtYVzw71wvGEfGyITsHuy1k4nVyI08mF+NfvVzBtoDtmDPKAp52Z1OUS0W0YLqnR\n",

"/ms5uJBWDBMDObuWRCQ5QRAwxMceQ3zskVNShY0nU/FTTAoyiquw5nAC1hxOwPDuXTBzkAfC/Byg\n",

"4MXZiTQCwyUBUHUt/9ew1nLWYE/Ym7NrSUSaw8HSGC+H+eKlUd2w/1oOIqOTcfhGLg7Hqm7OVsZ4\n",

"IsgDTwS787q8RBJjuCQAwL6rObiYXgxTQzmeH84zxIlIM8llAsb6O2KsvyNS8ivwY0wKNp1KRWZx\n",

"Fb7YG4tl+2/gAX/VxdmH+NjxckZEEmC4JFXXcp9qreWswV6wY9eSiLSAh50p3hrvh3+M9cWfl1QX\n",

"Zz+ZVIhdl7Kw61IWvO3NMGOQBx4LdIO1KS/OTtRZGC4Je65k41J6CbuWRKSVjBRyPNLPFY/0c8W1\n",

"rBJsiE7BL2fTkZBXjo/+uIr/7L6OSQEumDnIA/3crdnNJOpgDJd67ta1lk8P8eLoNSLSan5Olvhw\n",

"cm+8Od4Pv55LR2R0Cq5mlmDL6TRsOZ2GXi6WCA/xxCP9XGBqyF+BRB2Bp9bpud2Xs3ElswRmhnI8\n",

"H8quJRHpBnMjBWYO8sTOhcOw7aUhmDrAFYYKGS5nlGDxtosY9PE+vPfrJdzILpW6VCKdw3+26bH6\n",

"ehH/a7iu5TNDvWDDriUR6RhBEDDAwwYDPGzw7kP+2HI6DRtOJCMpvwLrjydj/fFkBHe1RXiIJ8b1\n",

"coKhgj0XovvFcKnH/rqShWtZpTA3UmAuu5ZEpONszAwxd7g35gzriqPxeYiMTsbeqzmISSxATGIB\n",

"7M0NMW2gO54M9oC7ranU5RJpLYZLPaXqWqrWWj471ItnUhKR3pDJBIT6dkGobxdkFVfhp5gU/Hwy\n",

"BdklSqw8GI9Vh+IxqocDwkM8MKK7A+QyngBE1BYMl3rqz8uqrqWFkQJzhnWVuhwiIkk4WRnjH2O7\n",

"Y8Hobth3NRuR0Sk4EpeH/ddysP9aDlytTTBjkAemDXTnSFyiVmK41EP19SIi2LUkImpkIJdhXG9n\n",

"jOvtjMS8cvx4IhmbT6chvagS/9l9Hf/bG4sHezkhPMQTg7ra8nJGRHfBcKmHdl7KxPXsUlgYKzBn\n",

"GNdaEhHdqqu9Gf7vIX+89kAP/HEhE5EnknE2pQg7LmRix4VM+DqYY+YgD0wNdIOlsYHU5RJpHIZL\n",

"PVN3S9dy9tCusDLlByMRUXOMDeR4NNANjwa64XJGMSKjU/DruXTcyCnD+79fwad/Xscj/VwQHuKJ\n",

"3q5WUpdLpDEYLvXMzouZuJFTBgtjBWZzrSURUav0crHC0ql9sHiCH7afTUdkdDJis8vw88lU/Hwy\n",

"FQFuVpgZ4olJfV1gYiiXulwiSTFc6pG6ehER+1Rdy+eGecPKhF1LIqK2sDQ2wKzBXngqxBMnkwqx\n",

"4UQydl3Mwvm0YpzfcgEf7biCxwLdMTPEAz5dzKUul0gSDJd6ZMeFDMTllMHSWIFnh3lJXQ4RkdYS\n",

"BAHBXW0R3NUW705UYvOpNPwYk4zUgkp8czQR3xxNxBAfO4SHeGKsvyMM5Lw4O+kPhks9UVcvYtnN\n",

"rmWoNxehExGpib25EV4c6YMXhnvj0I1cbIhOxv5rOTgWn49j8flwsDDCE0HueCLYAy7WJlKXS9Th\n",

"GC71xO/nMxCfWw4rEwM8O9RL6nKIiHSOTCZgVA8HjOrhgPSiSvx0IgU/n0xFTqkSy/bHYcWBOIT1\n",

"dER4iCdCu9lDxouzk45iuNQDtXX1jV3LuaFdYcGuJRFRh3K1NsHrD/bAwjBf/HUlC5HRyYhOKMCe\n",

"K9nYcyUbHramjRdntzXjtYZJtzBc6oHfL2QgIa8c1qYGeHqIl9TlEBHpDUOFDBP7umBiXxfE5ZQi\n",

"MjoFW8+kIaWgAp/suobP/4rFhD6qi7MHetrw4uykExgudZyqaxkHAJgb6s2uJRGRRLo5WOD9h3vh\n",

"zXF++P18BiJPJONCWjG2n8vA9nMZ8HOywMgeDvC2N0PXLmboam8GOzNDBk7SOgyXOu7XcxlIzCuH\n",

"DbuWREQawcRQjmlB7pgW5I4LaUWIjE7Gb+czcC2rFNeySptsa2GsgLe9Gby7mKOrvVmTm5kRf4WT\n",

"ZuI7U4fV1tVj+f6GtZbDvWHODyIiIo3S180a/37MGv83wR87L2XiWmYJEvLKkZhXjvSiSpRW1aqu\n",

"oZlWfMdzHS2NGoKmuarb2dDxdLcxhaGClz4i6TBt6LBfzqYjKb8CtmaGeHqwl9TlEBFRC6xMDfBk\n",

"sEeT+6pq6pBSUIGEXFXYTMwra/jfcuSVVSO7RInsEiWiEwqaPE8uE+BuY9IYPLt2MWsMn06WxjxL\n",

"nTocw6WOqqmrx/L9qrWWzw/35tcnRERaxthAju6OFujuaHHHY8WVNUjKK0dCXhkSc8sbu52JeeWo\n",

"qK5DUn4FkvIrcOB67m37lMHLzgw+t37N3hA+rU151jqpBxOHjvrlbDpSCipgZ2aIWYM9pS6HiIjU\n",

"yMrEAAHu1ghwt25yvyiKyClV3tHtTMgrR0p+Bapq6ptd2wkANqYGf3/N3uXvtZ1edmacl05twnCp\n",

"g2puWWv5wghvmBry/2YiIn0gCAIcLY3haGmMwT52TR6rratHWmFlY9hsDJ655cgsrkJhRQ0KU4pw\n",

"JqXojv26WBk3nsF+6xpPNxsTKDjakm7D1KGDtp1JQ2pBJezNDREewq4lEREBCrkMXvZm8LI3w6jb\n",

"HquorkVSXkVjt/Pm1+wJueUorqxBRnEVMoqrcDQuv8nzDOQCPGxN7+h2etuboYuFES+jpKfaHC6V\n",

"SiVee+017N69G8bGxggICEBkZCR27tyJd955B/X19aitrcU///lPPP300x1RM91Fde3fay1fGO7D\n",

"riUREd2TqaEC/i6W8HexvOOxwvLqW9Z0/t3tTMovR1VNPeJzyxGfWw5cbfo8M0N5Q7fTvDFw3lzj\n",

"aclrLuu0NiePt956C4IgIDY2FoIgICsrC6IoIjw8HAcPHkTfvn2RlJQEPz8/TJ06FRYWdy5Epo6z\n",

"9Uwa0gorYW9uxK4lERHdNxszQwSaGSLQ06bJ/fX1IrJKqhrCZlmTk4pSCypQXl2HS+kluJRecsc+\n",

"7c0Nb7lmZ0P47GIGD1tTGBtwfae2a1O4LC8vx7p165CWltbY6nZycoIoihAEAUVFRQCAkpIS2NnZ\n",

"wcjISO0FU8uqa+uxoqFrOW+ENxdgExFRh5HJBLhYm8DF2gRDu9k3eay6th4pBRV3dDsT88qRU6pE\n",

"Xlk18sqqcTKpsMnzBAFwszFpeu3OhpuLtQnkvIySVmhTuIyPj4etrS2WLFmCvXv3wsTEBO+//z7C\n",

"wsKwceNGTJ06FWZmZigsLMS2bdtgaNj8ZQ2USiWUSmWT++rq6tr/KggAsOV0GtKLKtHFgl1LIiKS\n",

"jqFChm4O5ujmYA7AscljZcrahssolSMxt2n4LFXWIrWgEqkFlTgcm3vHPr3sTJueVMQxmRqpTeGy\n",

"trYWycnJ8Pf3xyeffIKzZ89i7NixuHz5Mj766CNs27YNw4cPx8mTJ/Hwww/j4sWLsLe3v2M/S5cu\n",

"xQcffNDkvpCQkPt7JXquurYeXx5QdS1fHOHDrxWIiEgjmRsp0NvVCr1drZrcL4oi8sqqm55U1NDt\n",

"TM6vQHVtPWKzyxCbXQYgu8lzb47JvP3C8V72ZpxOJwFBFEWxtRvn5eXB0dER1dXVkMtV4SUoKAjT\n",

"p0/H2rVrERsb27htUFAQlixZgrFjx96xn+Y6l++++y4iIiLa+zr0XmR0Mt7ZfgkOFkY4/MYohksi\n",

"ItIZdfUiMooqGwJn2S2XU1KNybxbkuGYzM7Xpjhvb2+PsLAw7N69GxMmTEBiYiISExPx+OOP44MP\n",

"PsDVq1fRs2dPxMXFIT4+Hj169Gh2P0ZGRnesx7wZVqntlLV1f3ctR7JrSUREukUuE+Buawp3W1OM\n",

"6N6lyWO3jsm8ObHo5olF+eUckymFNveKV69ejTlz5uDNN9+ETCbDmjVr4OnpibVr12LatGmQyWSo\n",

"r6/HihUr4OHhce8d0n3bdDIVmcVVcLQ0umM2LRERkS6765jMihok5jes62zHmEzvLred0W5vBhsz\n",

"jsm8lzZ9Ld6RXn31VXz++edSl6F1qmrqMPI/B5FVUoUPHu6Fp4d4SV0SERGRRrvXmMza+pajEcdk\n",

"3htXuWq5TadSkVVSBSdLY0wPcpe6HCIiIo13tzGZNY1jMstuCZ+qG8dktg7DpRarqvl7reX8UVxr\n",

"SUREdL8M5LLGbuRov6aPtXdMpkImwMPOtOkZ7Q0XjnfQwTGZDJda7OeYFGSXKOFsZYxp7FoSERF1\n",

"qLaMyby166msrVedcJRbfsfzWhqT6WVvBisT7RyTyXCppapq6rDyYDwA4KVR3WCkYNeSiIhIKncb\n",

"k5lZUtV4wXh9GJPJcKmlfjyRgpxSJVysjDFtoJvU5RAREVEzZDIBrtYmcLU2wTBf9Y3JdLVWXUYp\n",

"xNsO80d168yXdE8Ml1qoqqYOqw6pupbzR7NrSUREpI3uNiaztKoGyfkViG+4aHzjrWFMZlphJdIK\n",

"K2GkgReCZ7jUQhtOpCC3VAlXaxM8Hsi1lkRERLrGwtigVWMy7c2NWtiDdBgutUxldR1WNay1XDC6\n",

"G0dXERER6RFBENDFwghdLIwQ3NVW6nKaxWSiZTacSEZemRJuNiZ4dADXWhIREZFmYbjUIhXVtVjd\n",

"sNZywSh2LYmIiEjzMJ1okcjoZOSVVcPd1gSPBrJrSURERJqH4VJLVFTXYs2hBADAy6N8YaBHY6SI\n",

"iIhIezChaIkfjicjv7waHrammDLAVepyiIiIiJrFcKkFypW1WHO4oWs5uhu7lkRERKSxmFK0wPfH\n",

"k1FQXg1PO1NM6c+uJREREWkuhksNV6asxdrDqjPEXx7tCwW7lkRERKTBmFQ03PpjSSisqEFXezNM\n",

"7ucidTlEREREd8VwqcFKq2rwVdTfay3ZtSQiIiJNx7Siwb4/noyiihp425vh4QB2LYmIiEjzMVxq\n",

"qNKqGqxtOEN8YRjXWhIREZF2YGLRUN8dTUJxZQ28u5hhEruWREREpCUYLjVQyS1rLReF+UIuEySu\n",

"iIiIiKh1GC410LdHklBSVYtuDuaY2JddSyIiItIeDJcapriyBl8f+XutJbuWREREpE0YLjXMt0cT\n",

"UVpVC18HczzUx1nqcoiIiIjahOFSgxRX1mDdkUQAwKIx7FoSERGR9mG41CDrjqi6lt0dzTGhN7uW\n",

"REREpH0YLjVEcUUNvr3ZtQzrDhm7lkRERKSFGC41xNdHElCqrIWfkwXG93aSuhwiIiKidmG41ABF\n",

"FdX49mgSANV1Ldm1JCIiIm3FcKkBvo5KRFlD1/LBXuxaEhERkfZiuJRYYXk1vj2qWmv5yhiutSQi\n",

"IiLtxnApsa+iElBeXYeezpZ4wN9R6nKIiIiI7gvDpYQKyqux/lgSAOCVMVxrSURERNqP4VJCaw+r\n",

"upa9XNi1JCIiIt3AcCmR/DIlvj+eBEC11lIQ2LUkIiIi7cdwKZG1UQmoqK5DH1crjOnpIHU5RERE\n",

"RGrBcCmBvDIlvj+WDEC11pJdSyIiItIVDJcSWHs4AZU1dejrZoXRfuxaEhERke5guOxkuaW3rrVk\n",

"15KIiIh0i6KtT1AqlXjttdewe/duGBsbIyAgABEREQgLC2vcpqKiAgkJCcjJyYGtra1aC9Z2aw7F\n",

"o6qmHgHu1hjVg11LIiIi0i1tDpdvvfUWBEFAbGwsBEFAVlYW7OzscO7cucZt/vvf/+LQoUMMlrfJ\n",

"Ka1C5AmutSQiIiLd1aZwWV5ejnXr1iEtLa0xGDk53TkLe926dVi6dKl6KtQhaw4loKqmHv3crTGy\n",

"exepyyEiIiJSuzatuYyPj4etrS2WLFmCgQMHIjQ0FPv27WuyzbFjx1BYWIiJEye2uB+lUomSkpIm\n",

"t7q6uva9Ai2RU1KFyGhV1/IfY3ldSyIiItJNbQqXtbW1SE5Ohr+/P06dOoVly5Zh+vTpyM7Obtxm\n",

"3bp1mDVrFhSKlpuiS5cuhZWVVZNbTExM+1+FFlh1KB7K2nr097DGcF97qcshIiIi6hBtCpceHh6Q\n",

"yWSYOXMmAKB///7o2rUrLl68CAAoKyvDpk2bMHv27LvuZ/HixSguLm5yCw4ObudL0HzZJVXYcCIF\n",

"APAPTuMhIiIiHdamcGlvb4+wsDDs3r0bAJCYmIjExET07NkTALBx40YEBATAz8/vrvsxMjKCpaVl\n",

"k5tcLm/nS9B8qw7Go7q2HoGeNghl15KIiIh0WJvPFl+9ejXmzJmDN998EzKZDGvWrIGrqysA1Vfi\n",

"c+fOVXuR2iyruAo/xrBrSURERPqhzeHS29sbBw4caPaxY8eO3XdBumbVwThU19YjyMsGQ7vZSV0O\n",

"ERERUYfihJ4OlFlciZ9iUgGwa0lERET6geGyA608EI/qunoEe9lisA+7lkRERKT7GC47SEZRJTae\n",

"VHUtXxnLaTxERESkHxguO8iXB+JQXVePQV1tMcSHZ4gTERGRfmC47ABphRXYdKphreXY7hJXQ0RE\n",

"RNR5GC47wMqD8aipEzHY2w4h3lxrSURERPqD4VLN0gorsLmha/nKGF+JqyEiIiLqXAyXavblgTjU\n",

"1IkY4mOHQexaEhERkZ5huFSj1IIKbD6VBoBrLYmIiEg/MVyq0Yr9caitFzGsmz2CvGylLoeIiIio\n",

"0zFcqklKfgW2nLnZteRaSyIiItJPDJdqsuLADdTViwj1tUegJ7uWREREpJ8YLtUgOb8cW8+kAwBe\n",

"GcO1lkRERKS/GC7VYPn+ONTVixjevQsCPW2kLoeIiIhIMgyX9ykprxy/nFV1Lf/B61oSERGRnmO4\n",

"vE/L9qvWWo7s0QX9Pdi1JCIiIv3GcHkfEnLLsP0s11oSERER3cRweR9W7I9DvQiM9nNAP3drqcsh\n",

"IiIikhzDZTvF55Zh+7mbXUuutSQiIiICGC7bbfm+G6gXgTA/B/R1s5a6HCIiIiKNwHDZDnE5Zfjt\n",

"fAYArrUkIiIiuhXDZTssa+hajunpiD5uVlKXQ0RERKQxGC7b6EZ2KX6/cLNrybWWRERERLdiuGyj\n",

"ZfvjIIrAA/6O6O3KriURERHRrRgu2yA2uxQ7GrqWi9i1JCIiIroDw2UbROy7AVEEHuzliF4u7FoS\n",

"ERER3Y7hspWuZ5Vi58VMADxDnIiIiKglDJetFLEvFqIIjO/thJ7OllKXQ0RERKSRGC5b4WpmCXZe\n",

"zALAtZZEREREd8Nw2QrL9t0AADzUxxl+TuxaEhEREbWE4fIermSUYNelLAgCsDCMXUsiIiKiu2G4\n",

"vIeIfbEAgAl9nNHDyULiaoiIiIg0G8PlXVzOKMbuy9kQBOAVdi2JiIiI7onh8i7+t1e11nJiXxf4\n",

"OrJrSURERHQvDJctuJRejD1XVF3LRWHdpC6HiIiISCswXLbgZtfy4QAXdHNg15KIiIioNRgum3Ex\n",

"rRh7r2ZDJgAvj+ZaSyIiIqLWYrhsxv/2qs4QV3UtzSWuhoiIiEh7MFze5nxqEfZdy4GM17UkIiIi\n",

"ajOGy9vc7FpO7ucK7y7sWhIRERG1RZvDpVKpxIIFC+Dr64s+ffogPDz8rvdrk7MphThwPRdymYCX\n",

"2bUkIiIiajNFW5/w1ltvQRAExMbGQhAEZGVl3fV+bRLRMEN8cj9XdLU3k7gaIiIiIu3TpnBZXl6O\n",

"devWIS0tDYIgAACcnJxavF+bnEkpxMGbXcvRvK4lERERUXu06Wvx+Ph42NraYsmSJRg4cCBCQ0Ox\n",

"b9++Fu9viVKpRElJSZNbXV3dfb+Y+3HzupZT+rvCi11LIiIionZpU7isra1FcnIy/P39cerUKSxb\n",

"tgzTp09HZWVls/dnZ2c3u5+lS5fCysqqyS0mJkYtL6g9TicX4nAsu5ZERERE96tN4dLDwwMymQwz\n",

"Z84EAPTv3x9du3ZFampqs/dfvHix2f0sXrwYxcXFTW7BwcH3+VLa7+YZ4o8OcIWnHbuWRERERO3V\n",

"pnBpb2+PsLAw7N69GwCQmJiIxMREDB48uNn7e/bs2ex+jIyMYGlp2eQml8vv86W0z6mkAkTdyINC\n",

"JnAaDxEREdF9avPZ4qtXr8acOXPw5ptvQiaTYc2aNXB1dW3xfk13c63lY4FucLc1lbgaIiIiIu3W\n",

"5nDp7e2NAwcOtPp+TXYyqQBH4lRdy/mjuNaSiIiI6H7p9YSeL/ao1lo+PpBdSyIiIiJ10NtweSIh\n",

"H8fi82EgZ9eSiIiISF30Nlx+sfdm19IdbjbsWhIRERGpg16Gy+Px+YhOKGDXkoiIiEjN9DJc3ryu\n",

"5fQgd7ham0hcDREREZHu0LtweT2rFCcSC2Aol+GlkexaEhEREalTmy9FpO16OFlg58JQXEwvggu7\n",

"lkRERERqpXfhEgD8XSzh72IpdRlEREREOkfvvhYnIiIioo7DcElEREREasNwSURERERqw3BJRERE\n",

"RGrDcElEREREasNwSURERERqw3BJRERERGrDcElEREREasNwSURERERqw3BJRERERGrDcElERERE\n",

"aiOIoihKXQQATJ06FV5eXp3ys+rq6hATE4Pg4GDI5fJO+ZnagMelZTw2zeNxaRmPTfN4XFrGY9M8\n",

"HpeWSXFsPD09sWjRortuozHhsjOVlJTAysoKxcXFsLS0lLocjcHj0jIem+bxuLSMx6Z5PC4t47Fp\n",

"Ho9LyzT12PBrcSIiIiJSG4ZLIiIiIlIbhksiIiIiUhu9DJdGRkZ47733YGRkJHUpGoXHpWU8Ns3j\n",

"cWkZj03zeFxaxmPTPB6XlmnqsdHLE3qIiIiIqGPoZeeSiIiIiDoGwyURERERqQ3DJRERERGpjU6H\n",

"yxs3bmDIkCHo3r07goKCcPny5Wa3W7duHXx9feHj44O5c+eipqamkyvtXK05LgcPHoSJiQn69evX\n",

"eKusrJSg2s6zcOFCeHl5QRAEnDt3rsXt9O39ArTu2Ojje6aqqgqTJ09G9+7dERAQgLFjxyIuLq7Z\n",

"bXfs2AE/Pz/4+vpi6tSpKCkp6eRqO09rj0tSUhLkcnmT90x8fLwEFXeuBx54AH379kW/fv0QGhqK\n",

"s2fPNrudvn3WtOa46OPnzE3ffvstBEHA9u3bm31coz5jRB02atQo8dtvvxVFURQ3b94sDhw48I5t\n",

"EhISRGdnZzEzM1Osr68XJ02aJK5YsaKTK+1crTkuBw4cEAMCAjq3MIkdOnRITE1NFT09PcWzZ882\n",

"u40+vl9EsXXHRh/fM5WVleIff/wh1tfXi6IoisuXLxdHjBhxx3alpaWig4ODePXqVVEURXH+/Pni\n",

"66+/3pmldqrWHpfExETRysqqc4vTAIWFhY1/3rZtm9i3b987ttHHz5rWHBd9/JwRRdV/K4MHDxZD\n",

"QkLEX3755Y7HNe0zRmc7lzk5OTh16hTCw8MBAI8++ihSU1Pv+Nfzli1b8PDDD8PJyQmCIGDevHn4\n",

"6aefpCi5U7T2uOij4cOHw83N7a7b6Nv75abWHBt9ZGxsjAkTJkAQBABASEgIkpKS7thu165d6N+/\n",

"P/z8/AAAL730kk6/b1p7XPSVtbV145+Li4sbj9Ot9PGzpjXHRR/V19fjueeew/Lly1u85JCmfcbo\n",

"bLhMTU2Fs7MzFAoFAEAQBHh4eCAlJaXJdikpKfD09Gz8u5eX1x3b6JLWHhcAiI+Px4ABAxAUFISV\n",

"K1d2dqkaSd/eL22l7++ZiIgIPPLII3fc39z7JjMzE7W1tZ1ZnmRaOi4AUF5ejqCgIAwYMAD/+te/\n",

"UFdX18nVSWPWrFlwd3fHu+++ix9++OGOx/X1s+ZexwXQv8+Zzz//HEOHDkVgYGCL22jaZ4xCkp9K\n",

"Gm/AgAFIS0uDlZUV0tLSMGHCBNjb22PatGlSl0YaSt/fM0uWLEFcXBz27dsndSka5W7HxdnZGenp\n",

"6XBwcEBBQQGmT5+Ozz77DG+88YYElXau77//HgCwfv16vPnmm9i5c6fEFWmGex0XffucuXTpErZu\n",

"3YrDhw9LXUqb6Gzn0t3dvUlqF0URKSkp8PDwaLKdh4cHkpOTG/+elJR0xza6pLXHxdLSElZWVgAA\n",

"Nzc3PPnkk4iKiur0ejWNvr1f2kKf3zP//e9/sW3bNuzatQumpqZ3PN7c++bWbxB01b2Oi5GRERwc\n",

"HAAAtra2mD17tt68Z256+umnceDAAeTn5ze5X98/a1o6Lvr2ORMVFYWkpCT4+vrCy8sL0dHReP75\n",

"57Fq1aom22naZ4zOhksHBwcMGDAAkZGRAICtW7fCzc0N3bp1a7Ldo48+it9++w1ZWVkQRRGrV6/G\n",

"E088IUXJnaK1xyUzMxP19fUAgNLSUuzYsQP9+/fv9Ho1jb69X9pCX98zn3/+OX766Sfs2bOnyZqx\n",

"W40bNw5nzpzBtWvXAAArV67U+fdNa45LTk5O4xnQSqUS27Zt0/n3TFFRETIyMhr/vn37dtjZ2cHW\n",

"1rbJdvr2WdPa46JvnzMvvvgiMjMzkZSUhKSkJISEhGDt2rV48cUXm2yncZ8xkp1K1AmuXbsmhoSE\n",

"iL6+vmJgYKB44cIFURRFcc6cOeKvv/7auN3atWtFb29v0dvbW5w9e7ZYXV0tVcmdojXHZfny5aK/\n",

"v7/Yt29f0d/fX3zvvfcaz/zUVc8//7zo6uoqyuVy0cHBQfTx8RFFke8XUWzdsdHH90xqaqoIQPT2\n",

"9hYDAgLEgIAAMTg4WBRFUXz33XfFVatWNW7766+/ij169BB9fHzERx55RCwqKpKq7A7X2uOydetW\n",

"sVevXo3vmQULFohVVVVSlt7hkpKSxKCgILF3795i3759xbCwsMYrMOjzZ01rj4s+fs7casSIEY1n\n",

"i2vyZwxnixMRERGR2ujs1+JERERE1PkYLomIiIhIbRguiYiIiEhtGC6JiIiISG0YLomIiIhIbRgu\n",

"iYiIiEhtGC6JiIiISG0YLomIiIhIbRguiYiIiEhtGC6JiIiISG0YLomIiIhIbf4/L0U1NRUE680A\n",

"AAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-afa9656d-53d1-4ec1-9ede-6773df58f60a\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-afa9656d-53d1-4ec1-9ede-6773df58f60a\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_10['Weight(Pounds)'].plot(kind='line', figsize=(8, 4), title='Weight(Pounds)')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-57c3dadb-b70d-43e8-863f-36b3c4629cd4\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAABH30lEQVR4nO3deVhUhf7H8c+wDS4sCu4IuIBWLrgRam65ldXV1LJyrVTUvGZW\n",

"mvfefvfW7WZZaV4zUytNLa+Wppktmrmk5YKKW7mgIqjggoKAMsBwfn9QxCQaKMwA8349zzwPnnNm\n",

"5st5xvHjmXM+YzIMwxAAAABQwlwcPQAAAACcA8ETAAAAdkHwBAAAgF0QPAEAAGAXBE8AAADYBcET\n",

"AAAAdkHwBAAAgF0QPAEAAGAXBE8AAADYBcETgNOqXLmyNm7cWOjtO3furH/84x839VyffPKJ7rvv\n",

"vpu6r73ExMTIZDIpNjb2T7d96623NGzYsBKfCUD5QvAEUCbMnDlTNWvWVP5v+f3+++9lMpn08ssv\n",

"22zbt29fDRw48E8fMy0tTZ07dy62GTdu3CiTyaTs7Gyb5RkZGXruuef0n//8J2/ZsGHD5O7ursqV\n",

"K8vLy0shISF67bXXim2WkjZ27FitXbtWUVFRjh4FQBlC8ARQJnTv3l1nz57V/v3785atW7dOTZo0\n",

"0XfffZe3zGq1asOGDerRo4cjxizQkiVLFBAQoLCwMJvlAwYMUFpami5fvqx3331XL730khYsWOCQ\n",

"GYvKbDZr0KBBmj59uqNHAVCGEDwBlAmNGzdWYGCg1q1bl7ds3bp1+te//qVdu3YpLS1NkrRz504l\n",

"JyerW7du2r59uzp37iw/Pz8FBQXpxRdftDkaaTKZbELr/Pnz1bBhQ3l5ealv374aO3bsNUdEU1NT\n",

"9dhjj8nHx0d169bV7NmzJUlxcXG69957JUm+vr6qXLmyXn31VUnS8uXL1bNnz+v+biaTSd27d9cd\n",

"d9yhXbt2SZJ++ukndejQQVWqVFG9evX0wgsvyGKxXHf22NhYmUwmxcTESJIWLFiggIAAzZkzR8HB\n",

"wfLx8dFDDz2ky5cv593n2LFj6tq1q7y9vXXbbbdpw4YNNnPt3btXnTp1kq+vr6pUqaJWrVrp8OHD\n",

"eevvuecerV69+pojvABwPQRPAGVG9+7d84JnUlKSfv75Z/Xq1UstWrTIO1dz3bp1uv3225WWlqau\n",

"Xbtq1KhROnv2rDZv3qwvvvhCr7/+eoGPvXnzZo0aNUozZ85UcnKyhg8frg8//PCa7RYsWKDhw4fr\n",

"0qVLevvttzV27FjFxMQoMDBQX3/9tSQpOTlZaWlp+tvf/iZJioqKUpMmTa77e+Xk5Gjt2rU6cOCA\n",

"wsPDFRcXp27duqlfv346e/as1q5dq9WrV2vSpElF2l+JiYk6dOiQfvnlFx06dEjR0dF66623JOUe\n",

"GX7ggQcUGBiohIQErVu3TvPmzbO5/5gxY9S1a1dduHBB58+f1wcffCBfX9+89c2aNVNqaqoOHTpU\n",

"pLkAOC+CJ4Ayo0ePHtq8ebMsFovWr1+viIgIVahQQd26dcsLpOvWrVOPHj00a9YsPfDAA3rkkUfk\n",

"5uamoKAgTZw4UfPnzy/wsRcuXKjevXvr3nvvlaurq3r16qVevXpds12/fv109913y8XFRf369VPV\n",

"qlXzjlJez8WLF+Xj43PN8mXLlsnX11fVqlXThAkT9J///EeDBw/Wxx9/rNDQUI0fP14eHh4KCQnR\n",

"K6+8orlz59qc4/pn3NzcNHXqVFWoUEG1atVSnz59tGPHDknStm3bdPjwYb399tuqVKmSAgIC9OKL\n",

"L9rc38PDQ3FxcTp58qTc3NwUFhamGjVq5K3/7Xe6ePFioWcC4NwIngDKjK5du8pisWjr1q1at26d\n",

"unXrlrd83bp1SktL07Zt29S9e3cdPXpUn3/+uXx9ffNuo0ePVmJiYoGPffr0aQUFBdksCw4Ovma7\n",

"2rVr2/y5UqVKSk1NveHcVatWVUpKyjXLH374YSUnJyspKUkHDhzQs88+K0mKj49XgwYNbLZt2LCh\n",

"rl69qvPnz9/wufLz9/eXu7t7gbOeOnVKVapUsQnE9erVs7n/ggULZDKZdPfddysgIEDjx4/PO6VB\n",

"Ut7vVLVq1ULPBMC5ETwBlBl+fn5q2bKl1q1bZxM8IyIiFB8fr8WLF8tkMqlTp06qWbOmHnvsMSUn\n",

"J+fdLl++bBOc8qtTp45Onjxps+yPf/4zLi4Fv6W2atVKBw8eLPTj1K1bV8ePH7dZduzYMVWoUEHV\n",

"qlWTlFsFlZ6enrf+zJkzRZo1ICBAly5dsgnEf6xRCgoK0rx583Ty5Elt3LhR69at05QpU/LW79+/\n",

"X5UrV1bjxo2L9NwAnBfBE0CZ0qNHD3300UdKSUlR69atJUnu7u7q0KGDXn75ZbVr106VKlXSmDFj\n",

"9Nlnn+nTTz9VZmamrFarYmJi9M033xT4uIMHD9aqVav07bffymq16ptvvtFXX31VpNlq1qwpSTYX\n",

"4Ei59U7ffvttoR/nscce0+HDhzVz5kxlZmbq2LFjevHFFzV8+HCZTCZJUuvWrbVgwQJlZGTo7Nmz\n",

"eumll4o065133qmQkBBNmDBB6enpOn36tF555RWbbRYsWKBTp07JMAx5e3vLzc1Nbm5ueeu/+eYb\n",

"3X///TbLAOBGCJ4AypQePXooISFBXbp0sTnC2K1bNyUkJKh79+6SpDZt2uRdMFOnTh35+fmpf//+\n",

"1z2K2alTJ7377rsaM2aMfH19NWfOHA0cOFCenp6Fni00NFR//etf1aVLF/n6+ub1cg4cOFBxcXGK\n",

"jo4u1OMEBQVp7dq1Wrp0qapXr667775b9957r6ZOnZq3zaxZs5SYmCh/f391795dgwcPLvScUu75\n",

"n6tXr9aJEydUq1YtdevWTU8++aTNNhs2bFB4eLgqV66s5s2bq23btnkXOGVmZmrRokWaMGFCkZ4X\n",

"gHMzGUU5Ux0AnEifPn1Uo0YNzZkz55Yf6+OPP9Ynn3yiNWvWFMNkjjdt2jTt3btXH330kaNHAVCG\n",

"EDwB4FfLly9X9+7dVaFCBa1YsUIDBw7U999/r44dOzp6NAAoFzgxBwB+tXr1ao0YMUKZmZkKCgrS\n",

"hx9+SOgEgGLEEU8AAADYBRcXAQAAwC6KFDzHjRun4OBgmUwmm6szg4OD1ahRI4WFhSksLExLly4t\n",

"1DoAAAA4jyKd49m/f39NnDhRd9111zXrli5dqrCwsALvd6N1AAAAcA5FCp72OMneYrHIYrHYLDOb\n",

"zTKbzSX+3AAAACg5xXaO55AhQ9S0aVM9+eST13yX8I3W/dGUKVPk4+Njc+vdu3dxjQkAAAAHKZbg\n",

"uXnzZu3bt0+7d++Wv7+/hg4dWqh1BZk8ebJSUlJsbo0aNSqOMQEAAOBAxdLjGRgYKCn3+5LHjx+v\n",

"0NDQQq0rSEEfq7u6uhbHmAAAAHCgWz7imZ6eruTk5Lw/L1myRC1atPjTdQAAAHAuRTriGRkZqTVr\n",

"1igxMVE9e/aUl5eX1q5dq379+slqtcowDNWvX18LFy6UJJ09e/a66wAAAOBcysQ3F02YMEHTpk1z\n",

"9BgAAAC4BXxzEQAAAOyC4AkAAAC7IHgCAADALgieAAAAsAuCJwAAAOyC4AkAAAC7IHgCAADALorl\n",

"KzMBAIVzIc2iV9f8omreZo3sUF9+lc1/ficAKCcIngBgJwfPpGjER1E6k5IhSfp4W5xGdKivJzvU\n",

"U2Uzb8cAyj8+agcAO1izL0H9Z/+kMykZqudfSU3qeCvNkq3p3x1Rp6kbNH/rCVmyrY4eEwBKFP/F\n",

"BoASlJNj6O31R/Xf9UclSR1Dq2nmIy3k5emmrw4k6K21R3TiQrpeWv2z3v/hhJ7pHqoHW9SRq4vJ\n",

"wZMDQPHjiCcAlJB0S7bGfLw7L3QOv6uePhzaWj4V3eXiYtL9zWpr7TMdNaVvU9XwNut08lU99+le\n",

"3fP2Zq09mCjDMBz8GwBA8eKIJwCUgPiLVzRiYZQOJabKw9VF/3mwiR5qXfea7dxdXfRoeKAebFFH\n",

"H/0Yq3c3HtPRc2kauWiXWgT6amLPxmrbwM8BvwEAFD+OeAJAMdt+PEm9Z23VocRU+Vc2a8nIiAJD\n",

"Z36e7q6K7NRAmyd20dguDVXB3VV74pL16LxtGvLhDh04nWKn6QGg5BA8AaAYfbI9TgPf366L6Zlq\n",

"UsdbX4xtr1ZBVQp9f58K7nquZyNtmthZQ9oGyc3FpM1Hzuv+mVs09pPdOnEhvQSnB4CSRfAEgGKQ\n",

"Zc3R/606oL99vl/ZOYbub1ZLn0a2U23fCjf1eNW9PPVy7yb6/tnO6hNWWyaT9OW+BHWbtkl/+3y/\n",

"zl7OKObfAABKHsETAG7RpfRMDflghxb+dFKS9HzPRpr5aAtV8HC95ccO9Kuotx9poTV/7aC7G1eX\n",

"NcfQJ9vj1HHqBr329SGlXMm65ecAAHsheALALThyNlV/mbVFPx1PUiUPV80d3EpPdWkok6l465Bu\n",

"r+2tD4e10aej2qp1UBVZsnP03qZjumvq95q1IUZXMrOL9fkAoCQQPAHgJn3381k9OGur4i9eVd2q\n",

"FbRiTHv1uKNmiT5nm+Cq+nRUW304rLUa1/RSaka23vj2sDq9sVGLtp1UljWnRJ8fAG4FwRMAisgw\n",

"DM3aEKMRi6KUnmlV2/p++uKpu9Soppddnt9kMunuxjX01bgOentAmOpWraDzqRa9uPKAuk3bpFXR\n",

"p5WTQwcogNKH4AkARXA106px/4vWG98elmFIgyOCtPDJcFWp5GH3WVxcTOrToo7WT+isf/e+Q/6V\n",

"zTqZdEVP/y9a983cog2HzlFCD6BUIXgCQCElpFzVw3N+0uq9Z+TmYtIrfZro332ayN3VsW+lHm4u\n",

"Gtw2WJsndtbzPRvJy+ymXxIu6/EFOzVgzjZFxV506HwA8BuCJwAUwq6Tl/TAzK3afzpFVSq6a/Hw\n",

"OzUoIsjRY9mo6OGmp7o01OaJXRTZsb7Mbi7aEXtR/d/7ScM/2qlDiZcdPSIAJ0fwBIA/8dmuU3p0\n",

"7jZdSLOocU0vfTH2LkXUL71fY1mlkocm97pNG5/vrEfD68rVxaTvfjmne2f8oGeWRiv+4hVHjwjA\n",

"SRE8AeA6rDmG/rPmZz336V5lWnPU844aWj66nepWrejo0Qqllk8FTenbTOue6aj7mtWSYUif7zmt\n",

"u9/aqH+uOqDzqRZHjwjAyRA8AaAAKVez9MSCnZr3wwlJ0riuIZo9sJUqmd0cPFnR1a9WWbMea6nV\n",

"Y+9ShxB/ZVkNffTTSXV6Y4PeWntYlzMooQdgH0UKnuPGjVNwcLBMJpOio6PzlgcHB6tRo0YKCwtT\n",

"WFiYli5dmrfu6NGjateunUJDQ9WmTRsdPHiw2IYHgJJw7HyaHpy1VZuOnJenu4tmPdZSE7qHysWl\n",

"eEvh7a1pgI8WPXmnPhl+p5rX9dWVTKtmfh+jjlM3aN7m48rIsjp6RADlXJGCZ//+/bVlyxYFBV17\n",

"Qv3SpUsVHR2t6OhoDRgwIG95ZGSkRo4cqSNHjmjSpEkaNmzYLQ8NACVl05Hz6jNrq45fSFdtH099\n",

"Nqqd7mtWy9FjFat2Df21ckw7zRncSg2rV1bylSz956tf1OXNjfrfjjhlU0IPoIQUKXh27NhRAQEB\n",

"hd7+3LlzioqK0qBBgyRJ/fr1U3x8vGJiYq57H4vFosuXL9vcrFb+Fw6gZBmGofd/OK7H5+9Qaka2\n",

"WgVV0aqxd6lJHR9Hj1YiTCaTet5RU9+O76g3+jdTbR9PJaRk6IUV+9Xj7c36an8CHaAAil2xneM5\n",

"ZMgQNW3aVE8++aTOnz8vSYqPj1etWrXk5pZ7TpTJZFJgYKDi4uKu+zhTpkyRj4+PzW3Hjh3FNSYA\n",

"XCMjy6rnPt2nV9b8ohxDerh1gD4ZcaeqeZkdPVqJc3Ux6aHWdfX9c5314v23q2olDx0/n64xH+9W\n",

"71lbteXoBUePCKAcKZbguXnzZu3bt0+7d++Wv7+/hg4detOPNXnyZKWkpNjcwsPDi2NMALjGudQM\n",

"PTpvm5bvPiUXk/TPB27X6/2ayezm6ujR7MrT3VVP3lVPm57vrKe7hqiSh6v2nUrRoA+267F52xQd\n",

"n+zoEQGUA8VyeWZgYKAkyd3dXePHj1doaKgkqW7dukpISFB2drbc3NxkGIbi4uLyti+I2WyW2Wx7\n",

"lMHV1bn+AQBgH/tPpWjkoiglpGTI29NNswa2VIeQao4ey6G8PN31TPdQDWkbpFkbjmnxtpP68ViS\n",

"+szaqnvuqKnneoaqYXX7fCc9gPLnlo94pqenKzk5Oe/PS5YsUYsWLSRJ1atXV8uWLbV48WJJ0vLl\n",

"yxUQEKCGDRve6tMCwC35Yu8Z9X/vRyWkZKhBtUpaNfYupw+d+flVNuv/Hrhd3z/XSf1bBcjFJH1z\n",

"MFE9pm/WxM/26nTyVUePCKAMMhlFOHs8MjJSa9asUWJiovz8/OTl5aW1a9eqX79+slqtMgxD9evX\n",

"14wZMxQcHCxJOnz4sIYNG6akpCR5e3tr/vz5atq0aZGGnDBhgqZNm1ak+wBAQXJyDL217rBmbTgm\n",

"SerSqJpmPNpC3p7uDp6sdDtyNlVvfntYa38+Kyn3++GHRARpTJeGqlrJw8HTASgrihQ8HYXgCaA4\n",

"pFmyNf5/0frul9zwFNmpvib2bCzXMt7PaU+74y5p6jeHtO34RUlSZbObRnSoryc71FPlMliuD8C+\n",

"+OYiAE4hLumK+r67Vd/9clYebi6aPqC5Jt97G6GziFoGVtGSERFa+ES47qjtrTRLtqZ/d0Sdpm7Q\n",

"/K0nZMmm/g7A9RE8AZR7Px67oL/M2qIjZ9NU3cusZZFt9WCLwncSw5bJZFLH0GpaPfYuvfNYC9Xz\n",

"r6Sk9Ey9tPpn3f3mJi3fdUrWnFL/YRoAByB4AijXFv0Uq8Ef7FDylSw1D/DRF2PvUlhdX0ePVS64\n",

"uJh0f7PaWvtMR03p21Q1vM06nXxVz366V/fO2Ky1BxMpoQdgg+AJoFzKzM7R3z/frxdXHZQ1x1Cf\n",

"sNpaGtlWNX08HT1auePu6qJHwwO16fkumnxvY/lUcNeRs2kauWiX+s7+UduOJzl6RAClBMETQLmT\n",

"lGbR4A+26+PtcTKZpBfubazpA8Lk6U4ncEnydHdVZKcG2jyxi57q0kAV3F21Jy5Zj8zdpqEf7tCB\n",

"0ymOHhGAgxE8AZQrvyRcVu9ZW7X9xEVVNrvp/SGtNapTA5lMXERkLz4V3PV8z8ba9HxnDY4IkpuL\n",

"SZuOnNf9M7for0v2KPZCuqNHBOAgBE8A5cY3BxLVb/aPOnXpqoL8KurzMe3U9bYajh7LaVX39tS/\n",

"+zTR+mc7qU9YbZlM0uq9Z9Rt2ib97fP9Ons5w9EjArAzgieAMs8wDP13/VGNWrxLVzKtat/QT6ue\n",

"aq+QGny1Y2kQ5FdJbz/SQmv+2kF3N66u7BxDn2yPU6c3Nui1rw8p5UqWo0cEYCcETwBl2pXMbI39\n",

"ZI+mrTsiSRrWLlgfPR4u34p8m05pc3ttb304rI2WRbZV66AqysjK0XubjqnD1O/17sYYXc2kAxQo\n",

"7wieAMqs08lX9dB7P2nN/gS5u5r0Wt+m+tdf7pCbK29tpVl4var6dFRbfTistRrX9NLljGxN/eaw\n",

"Or2xQYu2nVSWNcfRIwIoIbw7AyiTomIvqvc7W3TwzGX5VfLQJyMi9Eh4oKPHQiGZTCbd3biG1ozr\n",

"oLcHhKlu1Qo6l2rRiysPqNu0TVoVfVo5lNAD5Q7BE0CZs2xnvB6dt00X0jJ1Wy1vrRrbXm2Cqzp6\n",

"LNwEVxeT+rSoo/UTOuvl3nfIv7JZJ5Ou6On/Reu+mVu04fA5SuiBcoTgCaDMyLbm6KXVBzVx+T5l\n",

"WQ3d26Smlo9uq4AqFR09Gm6Rh5uLhrQN1qbnO+u5HqHyMrvpl4TLenz+Tg2Yu027Tl509IgAigHB\n",

"E0CZkHwlU8Pm79T8rbGSpGe6hWrWYy1V0cPNsYOhWFUyu2ns3SHaPLGLRnasL7Obi3acuKh+s3/S\n",

"8I926lDiZUePCOAWEDwBlHox51LVZ9ZWbYm5oArurnpvUEs93S1ELi6UwpdXVSp56G+9btPG5zvr\n",

"0fC6cnUx6btfzuneGT9owtJoxV+84ugRAdwEgieAUm3DoXN6cNaPik26ojq+FbR8dDvd06SWo8eC\n",

"ndTyqaApfZtp7TMddV/TWjIMacWe07r7rY361xcHdT7V4ugRARQBwRNAqWQYhuZsOqYnPtqpVEu2\n",

"wutV1Rdj2+v22t6OHg0O0KBaZc0a2FKrx96lDiH+yrIaWvBjrDq9sUFvrT2syxmU0ANlAcETQKmT\n",

"kWXVhGV7NeXrQzIM6dHwQC1+8k75VTY7ejQ4WNMAHy168k59MvxONa/rqyuZVs38PkYdp27QvM3H\n",

"lZFFCT1QmnFWPoBS5ezlDI1ctEt745Pl6mLSPx+4XYMjgmQycT4nfteuob9WNvDTtwfP6s21hxVz\n",

"Lk3/+eoXfbj1hMZ3C1G/lgF8kQBQCvG3EkCpER2frAdmbtHe+GT5VnTXoifCNaRtMKETBTKZTLqn\n",

"SU1983QHTe3fTLV9PJWQkqFJy/erx9ub9fX+BDpAgVKG4AmgVPh8zyk9POcnnUu1KKR6Za16qr3a\n",

"NfR39FgoA9xcXfRw67r6/rnO+sd9t6lqJQ8dP5+u0R/vVu9ZW7U15oKjRwTwK4InAIey5hia8vUv\n",

"embpXmVm56jbbdW1Ykw7BflVcvRoKGM83V01vEN9bXq+s57uGqJKHq7adypFA9/froHvb9Pe+GRH\n",

"jwg4PYInAIdJzcjSiIVRmrPpuCTpqS4NNHdwa3l5ujt4MpRlXp7ueqZ7qDZN7KLH2wfLw9VFW2OS\n",

"1HvWVo1evEsx59IcPSLgtAieABwi9kK6Hnz3R31/6JzMbi6a8UiYnu/ZmFJ4FBv/ymb984E79P1z\n",

"ndS/VYBcTNLXBxLVY/omTfpsn84kX3X0iIDTIXgCsLstRy+o96ytijmXpprenvp0VFv1Dqvj6LFQ\n",

"TgVUqag3H2qub8Z3VI/bayjHkJZGxavzmxv1ypc/62J6pqNHBJxGkYLnuHHjFByce4VpdHT0Nevn\n",

"z58vk8mklStX5i3r3Lmz6tWrp7CwMIWFhWn69Om3OjOAMsowDM3fekJD5+9QytUshdX11Rdj26tZ\n",

"gK+jR4MTCK3hpblDWmvFmHa6s15VZWbn6P0tJ9Rx6gb9d/1RpVuyHT0iUO4Vqcezf//+mjhxou66\n",

"665r1sXGxmrevHmKiIi4Zt306dPVp0+fmx4SQNlnybbq/1Ye1NKoeElS35Z19OqDTeXp7urgyeBs\n",

"WgZW0f9GRmjz0Qua+s0hHTxzWdPWHdHCn2I1tktDPXpnoMxuvC6BklCkI54dO3ZUQEDANctzcnI0\n",

"fPhwzZw5U2Yz3ywCwNaFNIsGztuupVHxcjFJ/7jvNr31UHNCJxzGZDKpU2g1rR57l2Y+2kL1/Cvp\n",

"Qlqm/rX6Z3V9a5NW7D4law4doEBxK5ZzPKdNm6b27durVatWBa5/4YUX1LRpUw0YMEDHjx+/4WNZ\n",

"LBZdvnzZ5ma18hVoQFl18EyKer+zVVEnL8nL000fDmuj4R3qUwqPUsHFxaQHmtfW2mc66tUHm6qG\n",

"t1mnLl3VhGV7de+MzVr381lK6IFidMvB88CBA1q+fLn+8Y9/FLh+0aJFOnTokPbt26cOHTro/vvv\n",

"v+HjTZkyRT4+Pja3HTt23OqYABzgq/0J6j/7J51Ovqp6/pW08qn26tyouqPHAq7h7uqix+4M1Mbn\n",

"uuiFexvLp4K7jpxN04iFUeo3+0dtP57k6BGBcsFk3MR/5YKDg7Vy5UqFhYVp9uzZevnll/M+Yk9M\n",

"TJS3t7deeukljR49+pr7enp66vTp0/Lz8yvwsS0WiywWi82yF198UTNmzCjqmAAcJCfH0Nvrj+q/\n",

"649KkjqE+OudR1vKpyL9nCgbUq5mae7mY/pgywllZOVIkjo3qqbnezbSHbV9HDwdUHYV6eKigowe\n",

"PdomYHbu3Fnjx49Xnz59lJ2draSkJNWoUUOStHz5ctWoUeO6oVOSzGbzNeeJurpyHhhQVqRbsvXs\n",

"sr365mCiJGn4XfX0wr2N5eZKexvKDp8K7nq+Z2MNbRusmd/HaMmOOG08fF4bD5/XA81r69nuoQr2\n",

"59u1gKIqUvCMjIzUmjVrlJiYqJ49e8rLy0sxMTHX3d5isei+++6TxWKRi4uL/P399cUXX9zy0ABK\n",

"p/iLVzRiYZQOJabKw9VFrzzYRA+3ruvosYCbVt3bU//u00TDO9TTtHVHtCr6jFbvPaOv9ydoQJu6\n",

"Gtc1RDW8PR09JlBm3NRH7fY2YcIETZs2zdFjALiB7ceTNPrj3bqYnin/ymbNGdxSrYKqOnosoFgd\n",

"PJOiN789rA2Hz0uSPN1d9Hj7ehrVsQGnksDuMrNzdD7NonOXM3Qu1aJzqRadz/dz0zo+eqZ7qKPH\n",

"tHHLH7UDwCfb4/R/qw4oO8dQkzremju4tWr7VnD0WECxu6O2j+Y/Hq4dJy5q6jeHFHXykmZvPKaP\n",

"t53U6M4NNaxdsCp4cHoYbk26JTs3PP4aIs//GiTPpWbk/nw59+dLV7Ju+DiZ2Tl2mrjwCJ4AblqW\n",

"NUevfPmzPvrppCTp/ma19Eb/5vzDi3IvvF5VfTqqrb4/dE5Tvzmsw2dT9fo3hzR/6wmN6xqiAW3q\n",

"yp3zmpGPYRhKuZr1a6DMDY5//Pn8r2EzPbPwNZLuriZVq2xWNW9PVfcy/3rzVHVvs+qVwvOQCZ4A\n",

"bsql9Ew99clu/Xgst2bmuR6heqpLQ/o54TRMJpO63lZDnRtV1xd7T+uttUd06tJV/WPlAc374bie\n",

"7dFI9zetJRcX/k6UZ9YcQ0lpvx+RzA2Stj+f//WWaS38EciKHq55IbKat1nVKptV3fvXUOn1+8++\n",

"FdzL1GuMczwBFNmRs6ka/lGU4i5eUSUPV00fEKYed9R09FiAQ2Vm5+h/O+P03/VHdSEtU5J0ey1v\n",

"TbynkTqFVuM/ZWVMRpY17yPu8/mOTp5PzXe0MtWipDSLivIlV74V3a8JkdW8zKqe/4ilt6cqm8vn\n",

"scHy+VsBKDHf/XxWT/9vj9IzrapbtYLmDWmtxjW9HT0W4HAebi4a0jZY/VoGaP7WE5qz6bh+Tris\n",

"YfN3KrxeVU26pxEX3DmYYRhKs2TnO2cy96Pt/OdQ/naUMuXqjc+fzM/FJPlVNl/zUXduqMz/s1lm\n",

"N+c+FYkjngAKxTAMvbvxmN5ce1iGIUXUr6p3B7ZS1Uoejh4NKJUupWdq9qZjWvBjbN5FHt1uq6Hn\n",

"ezZSo5peDp6ufDEMQ5euZBX4UbfNEcrLFl3NKvz5kx6uLr8ejcwXKPN9zF3t16DpV9ks1zL0cbcj\n",

"ccQTwJ/KyLJq4mf79MXeM5KkwRFB+r8HbufiCeAGqlTy0N963abH2wdrxndHtSwqXt/9clbrD53V\n",

"gy3q6JluoapbtaKjxyzVsq05upCWeW2g/O1j77Tc+qDzaRZlWQt/HK2y2a3Aj7ir/eFopU8Fd06R\n",

"KGYc8QRwQwkpVzVy4S7tP50iNxeT/vWXOzQoIsjRYwFlzrHzaZq29ojW7E+QlHs18sA7g/RUl4aq\n",

"5mX+k3uXLxlZ1muv5rYJl7nnVSalZ6ooKaVqJY+8AFmtgCOUv/1c0YPjbo5C8ARwXbvjLily0S6d\n",

"T7WoSkV3zR7UShH1r/+VtwD+3L5TyXrj28P64egFSblXLw+/q55GdKwvL8+yW0JvGIZSLdl5gfL8\n",

"DWqDUjOyC/24ri4m+Vf2sAmO1bxsL8Sp7mWWf2WzPNz4FKa0I3gCKNBnu07pbyv2K9Oao0Y1vPT+\n",

"0NZ8LAgUo60xFzT1m0PaeypFklSlorue6tJQgyKC5Oleei5AyckxdPFKZoF9k+fyXZRzPtWijKzC\n",

"1wWZ3Vxsj0T+GiKr/eECnSoVPTh/shwheAKwYc0x9NrXv2jeDyckST1ur6FpA8LKbbUH4EiGYejb\n",

"g2f1xreHdOx8uiSplo+nnukWqr4t68itBM+jzrLm/H41d/6vXPxDfdCFNIuyi9AX5OXpds2V3b/9\n",

"/FuNUDUvT3l7unH+pBPiXxIAeVKuZmnckj3adCT3e6jH3d1Q47uFlqlyYqAsMZlMuqdJTXW7rbpW\n",

"7Dmtt9cd0ZmUDE1cvk9zNh/Tcz0a6Z4mNYsU0K5kZuddeFPQR92/hc2L6ZlFmFPyq+Rh8xF3tT98\n",

"1P3bVd58cxluhOAJQFLuhQ8jPorS8Qvp8nR30ZsPNdf9zWo7eizAKbi5uujh1nX1l+a1tXjbSc3a\n",

"EKNj59M1+uPdah7go4n3NFaT2j75isttL8TJ30WZZin8+ZNuLqa8AFntj0co812U41fZgxYLFAuC\n",

"JwBtOnJeYz/ZrdSMbNX28dTcIa3VpI6Po8cCnI6nu6uGd6ivAW3qat4PJ/T+D8e191SKBr6/vUiP\n",

"U8Hd1SZEVivgyu6y+HWLKPsInoATMwxDH2w5oVe/+kU5htQqqIreG9TK6apdgNLGy9NdE7qHakjb\n",

"IM3aEKOPt8Up05ojnwru19QD5e+i/O3oZWUz50+idCJ4Ak7Kkm3V3z8/oM92nZIkPdw6QP/u08Tp\n",

"v84NKE38K5v1zwfu0KR7GktSqbraHbgZBE/ACZ1LzdCoRbu0Oy5ZLibpH/fdrsfbB3OEBCilCJwo\n",

"LwiegJPZfypFIxdFKSElQ96ebnrnsZbqGFrN0WMBAJwAwRNwIl/sPaPnP90rS3aOGlSrpPeHtlE9\n",

"/0qOHgsA4CQInoATyMkx9Na6w5q14ZgkqUujaprxaAt5l+Gv5wMAlD0ET6CcS7Nk65ml0Vr381lJ\n",

"UmSn+prYszFfQQcAsDuCJ1COxSVd0fCFO3XkbJo83Fz0Wt+m6tsywNFjAQCcFMETKKd+PHZBYz7e\n",

"reQrWaruZdacwa3UIrCKo8cCADgxgidQDi36KVb/Wv2zrDmGmgX4aO7g1qrp4+nosQAATo7gCZQj\n",

"mdk5emn1QX28PU6S1Dustl7v14wOQABAqUDwBMqJpDSLxny8W9tPXJTJJE3s2VijOtWnFB4AUGq4\n",

"FGXjcePGKTg499tNoqOjr1k/f/58mUwmrVy5Mm/ZuXPndM899ygkJERNmjTR5s2bb3VmAH/wS8Jl\n",

"9Z61VdtPXFRls5veH9Jaozs3IHQCAEqVIgXP/v37a8uWLQoKCrpmXWxsrObNm6eIiAib5S+88IIi\n",

"IiJ09OhRzZ8/X4899piysrJubWoAeb49mKh+s3/UqUtXFeRXUZ+Paaeut9Vw9FgAAFyjSMGzY8eO\n",

"Cgi4toolJydHw4cP18yZM2U2m23WLVu2TKNGjZIktWnTRrVr19amTZtuYWQAkmQYhmauP6rIRbt0\n",

"JdOq9g39tOqp9gqp4eXo0QAAKFCxnOM5bdo0tW/fXq1atbJZnpSUpKysLNWsWTNvWXBwsOLi4q77\n",

"WBaLRRaLxWaZ1WotjjGBcuNKZrae/3Sf1uxPkCQNaxesv993m9xdi/R/SQAA7OqWg+eBAwe0fPny\n",

"Yjt3c8qUKXrppZdslv3x43vAmZ1OvqqRC6N08Mxlubua9HLvJno0PNDRYwEA8Kdu+fDIDz/8oNjY\n",

"WIWEhCg4OFjbtm3TyJEjNXv2bPn5+cnNzU2JiYl528fGxiow8Pr/SE6ePFkpKSk2t/Dw8FsdEygX\n",

"omIvqvc7W3TwzGX5VfLQx8MjCJ0AgDLjloPn6NGjlZCQoNjYWMXGxioiIkJz587V6NGjJUkPPfSQ\n",

"3nvvPUnSzp07dfr0aXXq1Om6j2c2m+Xt7W1zc3WlgxBYtjNej87bpgtpmbqtlrdWjW2v8HpVHT0W\n",

"AACFVqSP2iMjI7VmzRolJiaqZ8+e8vLyUkxMzA3v8/rrr2vw4MEKCQmRh4eHFi9eLHd391saGnAm\n",

"2dYcvfrVIX249YQk6d4mNfXWw81V0YMaXgBA2WIyDMNw9BB/ZsKECZo2bZqjxwDsLuVKlsYu2a0f\n",

"jl6QJI3vFqJxd4fIxYV+TgBA2cMhE6CUijmXquEfRSk26YoquLtq2sPNdW/TWo4eCwCAm0bwBEqh\n",

"DYfOadySPUq1ZKuObwXNG9Jat9f2dvRYAADcEoInUIoYhqG5m4/rtW8OyTCk8OCqendQS/lXNv/5\n",

"nQEAKOUInkApkZFl1eQV+/X5ntOSpEfD6+qlvzSRhxul8ACA8oHgCZQCZy9naOSiXdobnyxXF5P+\n",

"+cDtGhwRJJOJi4gAAOUHwRNwsL3xyRq5KEpnL1vkU8Fd7w5sqfYN/R09FgAAxY7gCTjQyj2nNXH5\n",

"PmVm5yikemW9P7S1gvwqOXosAABKBMETcABrjqE3vj2s9zYdkyR1bVxdbz8SJi9PvlwBAFB+ETwB\n",

"O0vNyNLT/4vW94fOSZLGdG6gZ3s0kiul8ACAco7gCdhR7IV0DV8YpZhzaTK7uWhq/2bqHVbH0WMB\n",

"AGAXBE/ATrbGXNCYj3cr5WqWanp7au6QVmoW4OvosQAAsBuCJ1DCDMPQRz/G6t9rfpE1x1BYXV/N\n",

"HdxK1b09HT0aAAB2RfAESlBmdo7+b9UB/W9nvCSpb4s6erVvU3m6uzp4MgAA7I/gCZSQC2kWjV68\n",

"SztjL8nFJE2+9zYN71CPUngAgNMieAIl4OCZFI1cuEunk6/Ky+ym/z7WQl0aVXf0WAAAOBTBEyhm\n",

"X+1P0LPL9upqllX1/Ctp3pDWali9sqPHAgDA4QieQDHJyTH09vqj+u/6o5KkDiH+eufRlvKpSCk8\n",

"AAASwRMoFumWbD27bK++OZgoSRp+Vz29cG9jubm6OHgyAABKD4IncIviL17RiIVROpSYKg9XF73y\n",

"YBM93Lquo8cCAKDUIXgCtyAu6Yr6zv5RF9Is8q9s1pzBLdUqqKqjxwIAoFQieAI3KeVKlh5fsEMX\n",

"0ixqXNNLHw5ro9q+FRw9FgAApRbBE7gJmdk5GrV4l46dT1ctH0999ES4avBNRAAA3BBXPgBFZBiG\n",

"/v75fv10PEmVPFz14bA2hE4AAAqB4AkU0bsbj+nTXafkYpLeGdhSt9XydvRIAACUCQRPoAhW7z2j\n",

"N749LEl6qXcTvo0IAIAiIHgChbTr5EU9++leSdKTd9XT4IggB08EAEDZUqTgOW7cOAUHB8tkMik6\n",

"OjpveY8ePdSsWTOFhYWpQ4cO2rNnT9664OBgNWrUSGFhYQoLC9PSpUuLbXjAXuKSrmjEwl3KzM5R\n",

"99tr6G+9bnP0SAAAlDlFuqq9f//+mjhxou666y6b5cuWLZOvr68k6fPPP9ewYcO0d+/evPVLly5V\n",

"WFjYLQ8LOELKlSwNW7BDF9Mz1bSOj2Y8EiZXF5OjxwIAoMwpUvDs2LFjgct/C52SlJKSIpOJf5RR\n",

"PvxWm3T8fLpq+3jq/aGtVdGDFjIAAG5Gsf0LOmTIEG3YsEGS9NVXX12zzjAMhYeH67XXXlO1atWu\n",

"+zgWi0UWi8VmmdVqLa4xgUIzDEN/+7U2qbLZTR9QmwQAwC0ptouLFi5cqPj4eL3yyiuaNGlS3vLN\n",

"mzdr37592r17t/z9/TV06NAbPs6UKVPk4+Njc9uxY0dxjQkU2rsbj+mzXafk6mLSO4+1oDYJAIBb\n",

"ZDIMwyjqnYKDg7Vy5crrnrdZoUIFnTp1Sn5+fjbLExISFBoaqtTU1Os+dkFHPF988UXNmDGjqGMC\n",

"N2313jP665Lci+T+3acJV7ADAFAMbvmj9uTkZF25ckW1a9eWJK1cuVJ+fn6qWrWq0tPTlZWVlXcO\n",

"6JIlS9SiRYsbPp7ZbJbZbLZZ5urqeqtjAoWWvzZpOLVJAAAUmyIFz8jISK1Zs0aJiYnq2bOnvLy8\n",

"tH79ej300EO6evWqXFxcVK1aNX355ZcymUw6e/as+vXrJ6vVKsMwVL9+fS1cuLCkfhfglp1MSrep\n",

"TZpMbRIAAMWmSMFzzpw5BS6/3jmY9evXt+n0BEqzlCtZenzBTmqTAAAoIXxzEaDc2qTIxVF5tUkf\n",

"UJsEAECxI3jC6RmGockr9mvb8YuqbHbTh4+3UXVqkwAAKHYETzi9WRtitHx3bm3SrIEt1bgmtUkA\n",

"AJQEgiec2qro03pz7RFJ0kt/uUOdQq//5QYAAODWEDzhtKJiL+r5z/ZJkkZ0qKdB1CYBAFCiCJ5w\n",

"SieT0jVyUW5tUo/ba+iFe6lNAgCgpBE84XSSr2Tm1SY1C/DR29QmAQBgFwRPOJXM7ByNWrwrrzbp\n",

"/SHUJgEAYC8ETzgNapMAAHAsgiecxjvfU5sEAIAjETzhFFZFn9Zb63Jrk17uTW0SAACOQPBEuRcV\n",

"e1HPf/p7bdLAO6lNAgDAEQieKNdiL6RrxMIoZVpz1POOGppMbRIAAA5D8ES5lXwlU08s2KlLV7Jy\n",

"a5MGtJALtUkAADgMwRPlUmZ2jiIX7dLxC+mq41tB7w9trQoero4eCwAAp0bwRLljGIZeWLFP20/8\n",

"Wps0rI2qe1GbBACAoxE8Ue7M/D5GK3afzqtNalTTy9EjAQAAETxRzqyKPq1p1CYBAFAqETxRbuzM\n",

"V5s0smN9apMAAChlCJ4oF2IvpGvkr7VJ99xRUy/c09jRIwEAgD8geKLMy1+b1DzAR9MHhFGbBABA\n",

"KUTwRJlmybZqZL7apHnUJgEAUGoRPFFmGYahycv3a8eJi/KiNgkAgFKP4Ikya+b3MVqxh9okAADK\n",

"CoInyqT8tUn/7t1EHalNAgCg1CN4oszJX5sU2bG+Hrsz0METAQCAwihS8Bw3bpyCg4NlMpkUHR2d\n",

"t7xHjx5q1qyZwsLC1KFDB+3Zsydv3dGjR9WuXTuFhoaqTZs2OnjwYLEND+fzx9qkSdQmAQBQZhQp\n",

"ePbv319btmxRUJBtMfeyZcu0b98+RUdHa8KECRo2bFjeusjISI0cOVJHjhzRpEmTbNYBRXEpPVOP\n",

"U5sEAECZVaTg2bFjRwUEBFyz3NfXN+/nlJQUmUy5YeDcuXOKiorSoEGDJEn9+vVTfHy8YmJibmFk\n",

"OCNLtlWRi3fpBLVJAACUWW7F9UBDhgzRhg0bJElfffWVJCk+Pl61atWSm1vu05hMJgUGBiouLk4N\n",

"GzYs8HEsFossFovNMqvVWlxjogyiNgkAgPKh2C4uWrhwoeLj4/XKK69o0qRJN/04U6ZMkY+Pj81t\n",

"x44dxTUmyqD/rv+9NundQdQmAQBQVhX7Ve1Dhw7Vhg0blJSUpLp16yohIUHZ2dmSco9cxcXFKTDw\n",

"+lchT548WSkpKTa38PDw4h4TZcTKPac1/bvc2qRX+jRRhxBqkwAAKKtuOXgmJyfrzJkzeX9euXKl\n",

"/Pz8VLVqVVWvXl0tW7bU4sWLJUnLly9XQEDAdT9mlySz2Sxvb2+bm6sr5/I5ox0nLmriZ7/XJj0a\n",

"Tm0SAABlWZHO8YyMjNSaNWuUmJionj17ysvLS+vXr9dDDz2kq1evysXFRdWqVdOXX36Zd4HRnDlz\n",

"NGzYML366qvy9vbW/PnzS+QXQfly4kK6Ihfl1ibd24TaJAAAygOTYRiGo4f4MxMmTNC0adMcPQbs\n",

"5FJ6pvrO/lEnLqSreV1f/W9EBFewAwBQDvDNRShVLNlWRS7KV5s0pBWhEwCAcoLgiVLDMAy9sHy/\n",

"dsTm1ibNf5zaJAAAyhOCJ0qNGeuP6vN8tUmhNahNAgCgPCF4olT4fM8pvf3dUUnUJgEAUF4RPOFw\n",

"O05c1KTP9kuSIjtRmwQAQHlF8IRDnbiQrpH5a5N6UpsEAEB5RfCEw1xKz9Tj83co+UqWmtf11fQB\n",

"YXJxMTl6LAAAUEIInnCI32qTYpOuqI5vBb0/pLU83alNAgCgPCN4wu7+WJu04PE2quZldvRYAACg\n",

"hBE8YXe/1Sa5uZg0e1ArhVCbBACAUyB4wq7+WJt0V4i/gycCAAD2QvCE3Ww/npRXmzSqUwM9Qm0S\n",

"AABOheAJuzhxIV2Ri3cp05qjXk1ramLPRo4eCQAA2BnBEyUuf21SWF1fTXuY2iQAAJwRwRMlypJt\n",

"1chFUYpNuqKAKhU0j9okAACcFsETJcYwDE36bJ92xl6Sl6eb5g+jNgkAAGdG8ESJefu7o1oZfSa3\n",

"NmkgtUkAADg7gidKxIrdpzRjPbVJAADgdwRPFLvtx5M0afk+SdQmAQCA3xE8UayOn0/TyEW7lGU1\n",

"qE0CAAA2CJ4oNhfTM/XEgp1KuUptEgAAuBbBE8XCkm1VJLVJAADgBgieuGWGYWgitUkAAOBPEDxx\n",

"y6Z/d1SrqE0CAAB/guCJW7J81yn999fapP88SG0SAAC4PoInbtq240l6YUVubdLozg00oA21SQAA\n",

"4PqKFDzHjRun4OBgmUwmRUdHS5IyMjLUp08fhYaGqnnz5urevbtiYmLy7tO5c2fVq1dPYWFhCgsL\n",

"0/Tp04v1F4BjHDufpshfa5Pua1pLz/egNgkAANxYkYJn//79tWXLFgUFBdksHzlypA4fPqy9e/eq\n",

"d+/eGj58uM366dOnKzo6WtHR0XrmmWdufWo4VP7apBaBvnrr4ebUJgEAgD9VpODZsWNHBQQE2Czz\n",

"9PRUr169ZDLlBo+IiAjFxsYW24AoXTKyrBq5MEonqU0CAABFVOzneM6YMUO9e/e2WfbCCy+oadOm\n",

"GjBggI4fP37D+1ssFl2+fNnmZrVai3tM3ATDMDRp+T5FncytTVrweBv5V6Y2CQAAFE6xBs9XX31V\n",

"MTExmjJlSt6yRYsW6dChQ9q3b586dOig+++//4aPMWXKFPn4+NjcduzYUZxj4iblr016b1ArNaxO\n",

"bRIAACi8Ygueb775plasWKGvv/5aFStWzFtet25dSZLJZNLYsWN1/PhxJSUlXfdxJk+erJSUFJtb\n",

"eHh4cY2Jm5S/NunVB5uqfUNqkwAAQNG4FceDTJs2TUuWLNF3330nX1/fvOXZ2dlKSkpSjRo1JEnL\n",

"ly9XjRo15Ofnd93HMpvNMpttP751deUcQkfKX5s0pnMDPdymroMnAgAAZVGRgmdkZKTWrFmjxMRE\n",

"9ezZU15eXtq4caOeffZZ1a9fX126dJGUGx63b98ui8Wi++67TxaLRS4uLvL399cXX3xRIr8ISsYf\n",

"a5OeozYJAADcpCIFzzlz5hS43DCMApdXqlRJUVFRRZ8KpQK1SQAAoDjxzUUoUP7apLpVqU0CAAC3\n",

"juCJaxiGoYmf/V6bNH8YtUkAAODWETxxjenrjuiLvbm1SXOoTQIAAMWE4Akbn+06pf9+HyMptzap\n",

"HbVJAACgmBA8keenY0maTG0SAAAoIQRPSMqtTRq1+NfapGbUJgEAgOJH8ISS0ix6fH6+2qSHqE0C\n",

"AADFj+Dp5DKyrBq5aJfiLlKbBAAAShbB04nl5Bh6/rN92kVtEgAAsAOCpxOb/t0RraY2CQAA2AnB\n",

"00l9tuuUZv5Wm9SX2iQAAFDyCJ5OKH9t0lNdGujh1tQmAQCAkkfwdDIx59IUuShKWVZD9zerpWe7\n",

"U5sEAADsg+DpRJLSLHpiwU5dzshWy0BfvUltEgAAsCOCp5PIX5sUWLUitUkAAMDuCJ5OIH9tkren\n",

"mz4c1kZ+1CYBAAA7I3g6gfy1Se8NbqWG1Ss7eiQAAOCECJ7l3KdR8Xm1SVP6NlW7BtQmAQAAxyB4\n",

"lmM/HrugySv2S5LGdmmoh6hNAgAADkTwLKdizqVp1KJdys7JrU2a0D3U0SMBAAAnR/Ash5LSLHp8\n",

"wQ5dzshWq6Aq1CYBAIBSgeBZzmRkWTViYZTiL15VYNWKmju4FbVJAACgVCB4liM5OYae+3Svdscl\n",

"U5sEAABKHYJnOTJt3RF9uS+B2iQAAFAqETzLiWVR8XpnA7VJAACg9CJ4lgM/xlzQ36hNAgAApVyR\n",

"gue4ceMUHBwsk8mk6OhoSVJGRob69Omj0NBQNW/eXN27d1dMTEzefc6dO6d77rlHISEhatKkiTZv\n",

"3lysv4CzizmXplGLc2uTHmhem9okAABQahUpePbv319btmxRUFCQzfKRI0fq8OHD2rt3r3r37q3h\n",

"w4fnrXvhhRcUERGho0ePav78+XrssceUlZVVPNM7uT/WJr3Rvxm1SQAAoNQqUvDs2LGjAgICbJZ5\n",

"enqqV69eMplyA09ERIRiY2Pz1i9btkyjRo2SJLVp00a1a9fWpk2bbnFsUJsEAADKGrfifsAZM2ao\n",

"d+/ekqSkpCRlZWWpZs2aeeuDg4MVFxd33ftbLBZZLBabZVartbjHLNOoTQIAAGVRsV5c9Oqrryom\n",

"JkZTpky56ceYMmWKfHx8bG47duwoxinLvrfWHdaX+xLk7mrSnMGtqU0CAABlQrEFzzfffFMrVqzQ\n",

"119/rYoVK0qS/Pz85ObmpsTExLztYmNjFRgYeN3HmTx5slJSUmxu4eHhxTVmmbcsKl6zNhyTJE3p\n",

"20xtG/g5eCIAAIDCKZbgOW3aNC1ZskTr1q2Tr6+vzbqHHnpI7733niRp586dOn36tDp16nTdxzKb\n",

"zfL29ra5ubpy7qJkW5v017sbqn+rgD+5BwAAQOlRpHM8IyMjtWbNGiUmJqpnz57y8vLSxo0b9eyz\n",

"z6p+/frq0qWLpNzwuH37dknS66+/rsGDByskJEQeHh5avHix3N3di/83KedizqXm1Sb9hdokAABQ\n",

"BhUpeM6ZM6fA5YZhXPc+NWrU0Nq1a4s2FWxcSLPo8QU7dTkjW62Dqmhq/2Z5LQIAAABlBd9cVMrl\n",

"r00K8quoOdQmAQCAMorgWYrl5Bh69tO92hOXLJ8K7tQmAQCAMo3gWYq9ufaw1vxam/TeoFZqUI3a\n",

"JAAAUHYRPEupZTvj9e7G3Nqk16hNAgAA5QDBsxTaGnNBf/s8tzZp3N0N1Y/aJAAAUA4QPEuZP9Ym\n",

"PUNtEgAAKCcInqXIhTSLhs3fqVRqkwAAQDlE8CwlfqtNOnUptzZp7pDW1CYBAIByheBZCuTkGHp2\n",

"mW1tUtVKHo4eCwAAoFgRPEuBN9ce1pr9ubVJcwZTmwQAAMongqeD/bE2KaI+tUkAAKB8Ing6ELVJ\n",

"AADAmRA8HeTo2d9rk3qHUZsEAADKP4KnA5xPtejxBb/XJr3ej9okAABQ/hE87YzaJAAA4KwInnb0\n",

"W21SdHxubdJ8apMAAIATIXja0Rt/qE2qT20SAABwIgRPO1m6M06zf61Ner0ftUkAAMD5EDztYMvR\n",

"C/r75wckSeO6hqhvS2qTAACA8yF4lrCjZ1M1+uN8tUndQhw9EgAAgEMQPEtQ/tqkNsFVNLU/tUkA\n",

"AMB5ETxLSP7apGC/ipozuLXMbtQmAQAA50XwLAE5OYYmLItWdHyyfCu660NqkwAAAAieJWHqt4f1\n",

"1f7E3NqkQdQmAQAASATPYve/HXF6b1NubdLU/s10J7VJAAAAkgiexWrL0Qv6+8rc2qSnu4bowRbU\n",

"JgEAAPymSMFz3LhxCg4OlslkUnR09J8ul6Tg4GA1atRIYWFhCgsL09KlS4tj7lLnyNlUjV68S9Yc\n",

"Q33Cams8tUkAAAA2ihQ8+/fvry1btigoKKhQy3+zdOlSRUdHKzo6WgMGDLj5aUup86kWPT5/p1It\n",

"ubVJr1ObBAAAcA23omzcsWPHIi13BlczrRq+MEqnk3Nrk+ZSmwQAAFCgIgXPmzVkyBAZhqHw8HC9\n",

"9tprqlat2nW3tVgsslgsNsusVmtJj3hTfqtN2vtrbdL8x8NVhdokAACAApX4xUWbN2/Wvn37tHv3\n",

"bvn7+2vo0KE33H7KlCny8fGxue3YsaOkx7wpU789rK8P/F6bVM+/kqNHAgAAKLVKPHgGBgZKktzd\n",

"3TV+/Hj98MMPN9x+8uTJSklJsbmFh4eX9JhFtoTaJAAAgCIp0Y/a09PTlZWVJV9fX0nSkiVL1KJF\n",

"ixvex2w2y2w22yxzdS1d50z+cPS8/kFtEgAAQJEU6YhnZGSkAgICdOrUKfXs2VMNGza84fKzZ8+q\n",

"S5cuatasmZo2bapNmzZp4cKFxf9b2NGRs6kas3i3rDmGHmxRh9okAACAQjIZhmE4eog/M2HCBE2b\n",

"Ns3RY+h8qkV9Zm3V6eSrCg+uqkXDw7mCHQAAoJD45qJCyl+bVM+/kuYMbkXoBAAAKAKCZyH8sTbp\n",

"w2FtqE0CAAAoIoJnIbz+7SF9fSBRHq4umju4NbVJAAAAN4Hg+SeW7IjTnE3HJeXWJoXXq+rgiQAA\n",

"AMomgucN5K9NGt8tRH1a1HHwRAAAAGUXwfM6Difa1iY93ZXaJAAAgFtB8CzAudQMPbFgp1It2Qqv\n",

"V1Wv9Wsqk8nk6LEAAADKNILnH1zNtGrER/lqkwZRmwQAAFAcCJ755OQYemZptPaeSqE2CQAAoJgR\n",

"PPP5OeGyvj98jtokAACAEuDm6AFKkyZ1fPTJ8DuVeDmD2iQAAIBiRvD8g9bBBE4AAICSwEftAAAA\n",

"sAuCJwAAAOyC4AkAAAC7IHgCAADALgieAAAAsAuCJwAAAOyC4AkAAAC7IHgCAADALgieAAAAsAuC\n",

"JwAAAOyC4AkAAAC7MBmGYTh6iD/Tt29fBQcH2+W5rFarduzYofDwcLm6utrlOcsC9sv1sW8Kxn65\n",

"PvZNwdgv18e+KRj75focsW+CgoL09NNP33CbMhE87eny5cvy8fFRSkqKvL29HT1OqcF+uT72TcHY\n",

"L9fHvikY++X62DcFY79cX2ndN3zUDgAAALsgeAIAAMAuCJ4AAACwC4LnH5jNZv3zn/+U2Wx29Cil\n",

"Cvvl+tg3BWO/XB/7pmDsl+tj3xSM/XJ9pXXfcHERAAAA7IIjngAAALALgicAAADsguAJAAAAu3Da\n",

"4Hn06FG1a9dOoaGhatOmjQ4ePFjgdh988IFCQkLUoEEDjRgxQllZWXae1L4Ks182btyoChUqKCws\n",

"LO929epVB0xrP+PGjVNwcLBMJpOio6Ovu52zvV6kwu0bZ3zNZGRkqE+fPgoNDVXz5s3VvXt3xcTE\n",

"FLjtl19+qcaNGyskJER9+/bV5cuX7Tyt/RR2v8TGxsrV1dXmNXPs2DEHTGxfPXr0ULNmzRQWFqYO\n",

"HTpoz549BW7nbO81hdkvzvg+85v58+fLZDJp5cqVBa4vVe8xhpPq0qWLMX/+fMMwDOPTTz81Wrdu\n",

"fc02x48fN2rVqmUkJCQYOTk5xgMPPGC88847dp7UvgqzXzZs2GA0b97cvoM52KZNm4z4+HgjKCjI\n",

"2LNnT4HbOOPrxTAKt2+c8TVz9epVY82aNUZOTo5hGIYxc+ZMo1OnTtdsl5qaalSvXt345ZdfDMMw\n",

"jKeeesp47rnn7DmqXRV2v5w4ccLw8fGx73ClwKVLl/J+XrFihdGsWbNrtnHG95rC7BdnfJ8xjNy/\n",

"K23btjUiIiKMzz///Jr1pe09ximPeJ47d05RUVEaNGiQJKlfv36Kj4+/5n/dn332mf7yl7+oZs2a\n",

"MplMGjVqlJYsWeKIke2isPvFGXXs2FEBAQE33MbZXi+/Kcy+cUaenp7q1auXTCaTJCkiIkKxsbHX\n",

"bPf111+rRYsWaty4sSRpzJgx5fp1U9j94qx8fX3zfk5JScnbT/k543tNYfaLM8rJydHw4cM1c+bM\n",

"69Ymlbb3GKcMnvHx8apVq5bc3NwkSSaTSYGBgYqLi7PZLi4uTkFBQXl/Dg4Ovmab8qSw+0WSjh07\n",

"ppYtW6pNmzZ699137T1qqeRsr5eicvbXzIwZM9S7d+9rlhf0uklISFB2drY9x3OY6+0XSUpPT1eb\n",

"Nm3UsmVLvfzyy7JarXaezjGGDBmiunXr6sUXX9SiRYuuWe+s7zV/tl8k53ufmTZtmtq3b69WrVpd\n",

"d5vS9h7j5pBnRZnWsmVLnTp1Sj4+Pjp16pR69eolf39/Pfzww44eDaWUs79mXn31VcXExGj9+vWO\n",

"HqVUudF+qVWrlk6fPq3q1avr4sWLGjBggN566y1NnDjRAZPa18KFCyVJH330kSZNmqSvvvrKwROV\n",

"Dn+2X5ztfebAgQNavny5Nm/e7OhRisQpj3jWrVvXJu0bhqG4uDgFBgbabBcYGKiTJ0/m/Tk2Nvaa\n",

"bcqTwu4Xb29v+fj4SJICAgL06KOP6ocffrD7vKWNs71eisKZXzNvvvmmVqxYoa+//loVK1a8Zn1B\n",

"r5v8nzyUV3+2X8xms6pXry5Jqlq1qp544gmnec38ZujQodqwYYOSkpJsljv7e8319ouzvc/88MMP\n",

"io2NVUhIiIKDg7Vt2zaNHDlSs2fPttmutL3HOGXwrF69ulq2bKnFixdLkpYvX66AgAA1bNjQZrt+\n",

"/frpiy++UGJiogzD0HvvvadHHnnEESPbRWH3S0JCgnJyciRJqamp+vLLL9WiRQu7z1vaONvrpSic\n",

"9TUzbdo0LVmyROvWrbM5Ry2/e+65R7t379ahQ4ckSe+++265f90UZr+cO3cu70pti8WiFStWlPvX\n",

"THJyss6cOZP355UrV8rPz09Vq1a12c7Z3msKu1+c7X1m9OjRSkhIUGxsrGJjYxUREaG5c+dq9OjR\n",

"NtuVuvcYh13W5GCHDh0yIiIijJCQEKNVq1bGvn37DMMwjCeffNJYtWpV3nZz58416tevb9SvX994\n",

"4oknjMzMTEeNbBeF2S8zZ840br/9dqNZs2bG7bffbvzzn//Mu0K1vBo5cqRRp04dw9XV1ahevbrR\n",

"oEEDwzB4vRhG4faNM75m4uPjDUlG/fr1jebNmxvNmzc3wsPDDcMwjBdffNGYPXt23rarVq0yGjVq\n",

"ZDRo0MDo3bu3kZyc7KixS1xh98vy5cuNO+64I+81M3bsWCMjI8ORo5e42NhYo02bNkaTJk2MZs2a\n",

"GV27ds1rinDm95rC7hdnfJ/Jr1OnTnlXtZfm9xi+qx0AAAB24ZQftQMAAMD+CJ4AAACwC4InAAAA\n",

"7ILgCQAAALsgeAIAAMAuCJ4AAACwC4InAAAA7ILgCQAAALsgeAIAAMAuCJ4AAACwC4InAAAA7OL/\n",

"Aedi2vsE8rH6AAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-57c3dadb-b70d-43e8-863f-36b3c4629cd4\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-57c3dadb-b70d-43e8-863f-36b3c4629cd4\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

}

]

},

{

"cell\_type": "code",

"source": [

"data.tail()"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/",

"height": 814

},

"id": "sVWFYiHfJV3N",

"outputId": "64645700-e124-4bb1-ee63-86a4edce7f1b"

},

"execution\_count": 5,

"outputs": [

{

"output\_type": "execute\_result",

"data": {

"text/plain": [

" Index Height(Inches) Weight(Pounds)\n",

"24995 24996 69.50215 118.0312\n",

"24996 24997 64.54826 120.1932\n",

"24997 24998 64.69855 118.2655\n",

"24998 24999 67.52918 132.2682\n",

"24999 25000 68.87761 124.8742"

],

"text/html": [

"\n",

" <div id=\"df-79cc26cd-4599-4e38-a08c-657643c02de7\" class=\"colab-df-container\">\n",

" <div>\n",

"<style scoped>\n",

" .dataframe tbody tr th:only-of-type {\n",

" vertical-align: middle;\n",

" }\n",

"\n",

" .dataframe tbody tr th {\n",

" vertical-align: top;\n",

" }\n",

"\n",

" .dataframe thead th {\n",

" text-align: right;\n",

" }\n",

"</style>\n",

"<table border=\"1\" class=\"dataframe\">\n",

" <thead>\n",

" <tr style=\"text-align: right;\">\n",

" <th></th>\n",

" <th>Index</th>\n",

" <th>Height(Inches)</th>\n",

" <th>Weight(Pounds)</th>\n",

" </tr>\n",

" </thead>\n",

" <tbody>\n",

" <tr>\n",

" <th>24995</th>\n",

" <td>24996</td>\n",

" <td>69.50215</td>\n",

" <td>118.0312</td>\n",

" </tr>\n",

" <tr>\n",

" <th>24996</th>\n",

" <td>24997</td>\n",

" <td>64.54826</td>\n",

" <td>120.1932</td>\n",

" </tr>\n",

" <tr>\n",

" <th>24997</th>\n",

" <td>24998</td>\n",

" <td>64.69855</td>\n",

" <td>118.2655</td>\n",

" </tr>\n",

" <tr>\n",

" <th>24998</th>\n",

" <td>24999</td>\n",

" <td>67.52918</td>\n",

" <td>132.2682</td>\n",

" </tr>\n",

" <tr>\n",

" <th>24999</th>\n",

" <td>25000</td>\n",

" <td>68.87761</td>\n",

" <td>124.8742</td>\n",

" </tr>\n",

" </tbody>\n",

"</table>\n",

"</div>\n",

" <div class=\"colab-df-buttons\">\n",

"\n",

" <div class=\"colab-df-container\">\n",

" <button class=\"colab-df-convert\" onclick=\"convertToInteractive('df-79cc26cd-4599-4e38-a08c-657643c02de7')\"\n",

" title=\"Convert this dataframe to an interactive table.\"\n",

" style=\"display:none;\">\n",

"\n",

" <svg xmlns=\"http://www.w3.org/2000/svg\" height=\"24px\" viewBox=\"0 -960 960 960\">\n",

" <path d=\"M120-120v-720h720v720H120Zm60-500h600v-160H180v160Zm220 220h160v-160H400v160Zm0 220h160v-160H400v160ZM180-400h160v-160H180v160Zm440 0h160v-160H620v160ZM180-180h160v-160H180v160Zm440 0h160v-160H620v160Z\"/>\n",

" </svg>\n",

" </button>\n",

"\n",

" <style>\n",

" .colab-df-container {\n",

" display:flex;\n",

" gap: 12px;\n",

" }\n",

"\n",

" .colab-df-convert {\n",

" background-color: #E8F0FE;\n",

" border: none;\n",

" border-radius: 50%;\n",

" cursor: pointer;\n",

" display: none;\n",

" fill: #1967D2;\n",

" height: 32px;\n",

" padding: 0 0 0 0;\n",

" width: 32px;\n",

" }\n",

"\n",

" .colab-df-convert:hover {\n",

" background-color: #E2EBFA;\n",

" box-shadow: 0px 1px 2px rgba(60, 64, 67, 0.3), 0px 1px 3px 1px rgba(60, 64, 67, 0.15);\n",

" fill: #174EA6;\n",

" }\n",

"\n",

" .colab-df-buttons div {\n",

" margin-bottom: 4px;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-convert {\n",

" background-color: #3B4455;\n",

" fill: #D2E3FC;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-convert:hover {\n",

" background-color: #434B5C;\n",

" box-shadow: 0px 1px 3px 1px rgba(0, 0, 0, 0.15);\n",

" filter: drop-shadow(0px 1px 2px rgba(0, 0, 0, 0.3));\n",

" fill: #FFFFFF;\n",

" }\n",

" </style>\n",

"\n",

" <script>\n",

" const buttonEl =\n",

" document.querySelector('#df-79cc26cd-4599-4e38-a08c-657643c02de7 button.colab-df-convert');\n",

" buttonEl.style.display =\n",

" google.colab.kernel.accessAllowed ? 'block' : 'none';\n",

"\n",

" async function convertToInteractive(key) {\n",

" const element = document.querySelector('#df-79cc26cd-4599-4e38-a08c-657643c02de7');\n",

" const dataTable =\n",

" await google.colab.kernel.invokeFunction('convertToInteractive',\n",

" [key], {});\n",

" if (!dataTable) return;\n",

"\n",

" const docLinkHtml = 'Like what you see? Visit the ' +\n",

" '<a target=\"\_blank\" href=https://colab.research.google.com/notebooks/data\_table.ipynb>data table notebook</a>'\n",

" + ' to learn more about interactive tables.';\n",

" element.innerHTML = '';\n",

" dataTable['output\_type'] = 'display\_data';\n",

" await google.colab.output.renderOutput(dataTable, element);\n",

" const docLink = document.createElement('div');\n",

" docLink.innerHTML = docLinkHtml;\n",

" element.appendChild(docLink);\n",

" }\n",

" </script>\n",

" </div>\n",

"\n",

"\n",

"<div id=\"df-c9d002f6-d0c8-47dc-ba27-5db536228def\">\n",

" <button class=\"colab-df-quickchart\" onclick=\"quickchart('df-c9d002f6-d0c8-47dc-ba27-5db536228def')\"\n",

" title=\"Suggest charts\"\n",

" style=\"display:none;\">\n",

"\n",

"<svg xmlns=\"http://www.w3.org/2000/svg\" height=\"24px\"viewBox=\"0 0 24 24\"\n",

" width=\"24px\">\n",

" <g>\n",

" <path d=\"M19 3H5c-1.1 0-2 .9-2 2v14c0 1.1.9 2 2 2h14c1.1 0 2-.9 2-2V5c0-1.1-.9-2-2-2zM9 17H7v-7h2v7zm4 0h-2V7h2v10zm4 0h-2v-4h2v4z\"/>\n",

" </g>\n",

"</svg>\n",

" </button>\n",

"\n",

"<style>\n",

" .colab-df-quickchart {\n",

" --bg-color: #E8F0FE;\n",

" --fill-color: #1967D2;\n",

" --hover-bg-color: #E2EBFA;\n",

" --hover-fill-color: #174EA6;\n",

" --disabled-fill-color: #AAA;\n",

" --disabled-bg-color: #DDD;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-quickchart {\n",

" --bg-color: #3B4455;\n",

" --fill-color: #D2E3FC;\n",

" --hover-bg-color: #434B5C;\n",

" --hover-fill-color: #FFFFFF;\n",

" --disabled-bg-color: #3B4455;\n",

" --disabled-fill-color: #666;\n",

" }\n",

"\n",

" .colab-df-quickchart {\n",

" background-color: var(--bg-color);\n",

" border: none;\n",

" border-radius: 50%;\n",

" cursor: pointer;\n",

" display: none;\n",

" fill: var(--fill-color);\n",

" height: 32px;\n",

" padding: 0;\n",

" width: 32px;\n",

" }\n",

"\n",

" .colab-df-quickchart:hover {\n",

" background-color: var(--hover-bg-color);\n",

" box-shadow: 0 1px 2px rgba(60, 64, 67, 0.3), 0 1px 3px 1px rgba(60, 64, 67, 0.15);\n",

" fill: var(--button-hover-fill-color);\n",

" }\n",

"\n",

" .colab-df-quickchart-complete:disabled,\n",

" .colab-df-quickchart-complete:disabled:hover {\n",

" background-color: var(--disabled-bg-color);\n",

" fill: var(--disabled-fill-color);\n",

" box-shadow: none;\n",

" }\n",

"\n",

" .colab-df-spinner {\n",

" border: 2px solid var(--fill-color);\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" animation:\n",

" spin 1s steps(1) infinite;\n",

" }\n",

"\n",

" @keyframes spin {\n",

" 0% {\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" border-left-color: var(--fill-color);\n",

" }\n",

" 20% {\n",

" border-color: transparent;\n",

" border-left-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" }\n",

" 30% {\n",

" border-color: transparent;\n",

" border-left-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" border-right-color: var(--fill-color);\n",

" }\n",

" 40% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" }\n",

" 60% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" }\n",

" 80% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" border-bottom-color: var(--fill-color);\n",

" }\n",

" 90% {\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" }\n",

" }\n",

"</style>\n",

"\n",

" <script>\n",

" async function quickchart(key) {\n",

" const quickchartButtonEl =\n",

" document.querySelector('#' + key + ' button');\n",

" quickchartButtonEl.disabled = true; // To prevent multiple clicks.\n",

" quickchartButtonEl.classList.add('colab-df-spinner');\n",

" try {\n",

" const charts = await google.colab.kernel.invokeFunction(\n",

" 'suggestCharts', [key], {});\n",

" } catch (error) {\n",

" console.error('Error during call to suggestCharts:', error);\n",

" }\n",

" quickchartButtonEl.classList.remove('colab-df-spinner');\n",

" quickchartButtonEl.classList.add('colab-df-quickchart-complete');\n",

" }\n",

" (() => {\n",

" let quickchartButtonEl =\n",

" document.querySelector('#df-c9d002f6-d0c8-47dc-ba27-5db536228def button');\n",

" quickchartButtonEl.style.display =\n",

" google.colab.kernel.accessAllowed ? 'block' : 'none';\n",

" })();\n",

" </script>\n",

"</div>\n",

"\n",

" </div>\n",

" </div>\n"

],

"application/vnd.google.colaboratory.intrinsic+json": {

"type": "dataframe",

"summary": "{\n \"name\": \"data\",\n \"rows\": 5,\n \"fields\": [\n {\n \"column\": \"Index\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 1,\n \"min\": 24996,\n \"max\": 25000,\n \"num\_unique\_values\": 5,\n \"samples\": [\n 24997,\n 25000,\n 24998\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n },\n {\n \"column\": \"Height(Inches)\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 2.3113337558972322,\n \"min\": 64.54826,\n \"max\": 69.50215,\n \"num\_unique\_values\": 5,\n \"samples\": [\n 64.54826,\n 68.87761,\n 64.69855\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n },\n {\n \"column\": \"Weight(Pounds)\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 6.00042969611344,\n \"min\": 118.0312,\n \"max\": 132.2682,\n \"num\_unique\_values\": 5,\n \"samples\": [\n 120.1932,\n 124.8742,\n 118.2655\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n }\n ]\n}"

}

},

"metadata": {},

"execution\_count": 5

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x786710c6bf40>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">Distributions</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_11['Index'].plot(kind='hist', bins=20, title='Index')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-376ac931-e37d-4c4c-9191-94d7e65c4015\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAjH0lEQVR4nO3dfVSUdf7/8dcINlmJJGqQMKIgZMqNmmZk30y3Vs3Q0rbctTTl\n",

"RmvXOm5HM+uUbqV79qY7a0UxuuGktqDJsd06a7rdmCakqaGpqDhkIh5NsDQUvH5/eJpfs4gxOBd8\n",

"Bp+Pc+YcZvhw8f40zjnPZoa5HJZlWQIAADBQq+YeAAAAoD6ECgAAMBahAgAAjEWoAAAAYxEqAADA\n",

"WIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAY40bN04TJkxo7jEANCNCBYBtBg0apCeeeKK5xwAQ\n",

"wAgVAABgLEIFQJOIjo7WnDlzNHz4cLVt21YxMTFasWKF15q//OUvcrlcCg0NVVpamk6dOuX1/WPH\n",

"jmnKlCnq0qWLwsLCNHz4cO3du1eStGPHDoWEhGjlypWe9VOmTNF1112n6upq+zcIwBaECoAmk52d\n",

"rWeeeUaVlZV66KGHNH78eFVVVUmS3n77bT333HNaunSpDh8+rP79+3uFjGVZuvPOO1VVVaXNmzfr\n",

"22+/VUJCgkaMGKHTp0+rR48eWrx4scaPH6+SkhK99dZbeuedd5SXlyen09lcWwZwgQgVAE0mLS1N\n",

"ffr0UatWrZSZmanjx49rx44dkqScnBxNnDhRKSkpat26tTIyMpSYmOj52c2bN2vdunXKyspS+/bt\n",

"5XQ69dxzz2nfvn36/PPPJUl33323Jk2apBEjRujBBx9Ubm6uoqOjm2OrAPyEUAHQZK6++mrP15df\n",

"frkk6fjx45Kkb775Rl27dvVa//Pru3fvVk1NjSIjIxUaGqrQ0FCFhYVJksrKyjzrHn74YZWUlCgh\n",

"IUHDhg2zbS8AmgahAsAIkZGRKi0t9brt59fDw8N1ySWX6PDhwzp27JjncvLkSY0dO1aSdPr0aY0d\n",

"O1ajR49WaWmp5s+f34Q7AGAHQgWAEcaPH6/XXntNGzZsUE1NjbKzs7VlyxbP9wcOHKhevXppypQp\n",

"qqiokCR99913ys/P14kTJyRJjz76qE6ePKk33nhDy5Yt04wZMzwvCwEITIQKACP87ne/0/Tp03X3\n",

"3XerQ4cO2rBhg+68807P94OCgvSf//xHl112ma6//nq1bdtWSUlJWrFihRwOh5YuXarc3Fzl5+fr\n",

"0ksv1U033aQ5c+ZozJgxOnz4cDPuDMCFcFiWZTX3EAAAAOfCMyoAAMBYhAoAADAWoQIAAIxFqAAA\n",

"AGMRKgAAwFiECgAAMBahAgAAjNUiQuXFF19s7hEAAIANWkSo7N+/v7lHAAAANmgRoQIAAFomQgUA\n",

"ABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQA\n",

"AICxbA2VqVOnKjo6Wg6HQ19++WW96xYvXqzu3bsrJiZG6enpOn36tJ1jAQCAAGFrqIwZM0affvqp\n",

"unTpUu+affv26cknn9Qnn3yikpISHTp0SAsXLrRzLAAAECBsDZX/+7//U2Rk5HnX5OXlKTU1VeHh\n",

"4XI4HJo8ebKWLFlS7/rq6mpVVVV5XWpra/09OgAAMEBwcw/gdru9nnGJjo6W2+2ud/3cuXM1e/Zs\n",

"r9sGDBhgy2zRj71ny3ElqXTe7bYdG/8f92Hgs+s+5P5rOtyHTaOl/ncOuDfTzpw5U5WVlV6X/v37\n",

"N/dYAADABs3+jIrL5dKePXs810tLS+Vyuepd73Q65XQ6vW4LCgqybT4AANB8mv0ZldGjR6ugoEDl\n",

"5eWyLEsLFizQvffe29xjAQAAA9gaKpmZmYqMjNQ333yjX//614qNjZUkpaWlqaCgQJLUrVs3zZ49\n",

"WzfeeKNiY2PVsWNHZWZm2jkWAAAIELa+9JOVlXXO27Ozs72up6enKz093c5RAABAAGr2l34AAADq\n",

"Q6gAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADA\n",

"WIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAA\n",

"jEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAA\n",

"wFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIA\n",

"AIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoA\n",

"AMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqEC\n",

"AACMZWuo7N69WykpKYqLi1O/fv1UXFxcZ82ZM2c0bdo0XXvttUpMTNQtt9yikpISO8cCAAABwtZQ\n",

"yczMVEZGhnbt2qUZM2ZowoQJddYUFBRo3bp12rJli7Zu3aohQ4bo8ccft3MsAAAQIGwLlYqKChUV\n",

"FWncuHGSpNGjR6usrKzOsyUOh0PV1dX68ccfZVmWqqqqFBkZaddYAAAggATbdeCysjJFREQoOPjs\n",

"r3A4HHK5XHK73YqNjfWsu+OOO7R27VqFh4erbdu26ty5sz766KN6j1tdXa3q6mqv22pra+3ZBAAA\n",

"aFbN/mbaoqIiffXVVzpw4IC+/fZbDRkyRJMnT653/dy5c9WuXTuvy8aNG5twYgAA0FRsC5WoqCgd\n",

"PHhQNTU1kiTLsuR2u+VyubzWvfnmmxo8eLBCQ0PVqlUrjR8/XmvXrq33uDNnzlRlZaXXpX///nZt\n",

"AwAANCPbQqVTp07q06ePcnNzJUn5+fmKjIz0etlHkrp166Y1a9bo1KlTkqRVq1apV69e9R7X6XQq\n",

"JCTE6xIUFGTXNgAAQDOy7T0qkpSVlaUJEyboueeeU0hIiHJyciRJaWlpSk1NVWpqqh566CHt2LFD\n",

"SUlJat26tcLDw7VgwQI7xwIAAAHC1lCJj4/X+vXr69yenZ3t+drpdGrRokV2jgEAAAJUs7+ZFgAA\n",

"oD6ECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIA\n",

"AIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoA\n",

"AMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEqAADAWIQKAAAwFqEC\n",

"AACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBahAgAAjEWoAAAAYxEq\n",

"AADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMRKgAAwFiECgAAMBah\n",

"AgAAjEWoAAAAYxEqAADAWIQKAAAwFqECAACMRagAAABjESoAAMBYhAoAADAWoQIAAIxFqAAAAGMR\n",

"KgAAwFiECgAAMJatobJ7926lpKQoLi5O/fr1U3Fx8TnXbdu2TYMGDVKPHj3Uo0cPLV++3M6xAABA\n",

"gAi28+CZmZnKyMjQhAkTlJeXpwkTJqiwsNBrzYkTJzRy5Ei9+eabGjhwoGpra3X06FE7xwIAAAHC\n",

"tmdUKioqVFRUpHHjxkmSRo8erbKyMpWUlHite/vttzVgwAANHDhQkhQUFKSOHTvWe9zq6mpVVVV5\n",

"XWpra+3aBgAAaEa2hUpZWZkiIiIUHHz2SRuHwyGXyyW32+21bvv27XI6nRoxYoSSk5N1//336/Dh\n",

"w/Ued+7cuWrXrp3XZePGjXZtAwAANCOfQ+WDDz7w6wA1NTVavXq1srKytHnzZnXu3FlTpkypd/3M\n",

"mTNVWVnpdenfv79fZwIAAGbwOVTmzJmj+Ph4vfjii6qqqqp3XVRUlA4ePKiamhpJkmVZcrvdcrlc\n",

"XutcLpduueUWde7cWQ6HQ+PGjdOGDRvqPa7T6VRISIjXJSgoyNdtAACAAOBzqKxbt05Lly7VV199\n",

"pbi4OD344IPavn17nXWdOnVSnz59lJubK0nKz89XZGSkYmNjvdb95je/UWFhoSd6/vWvfykpKakx\n",

"ewEAAC1Mo96j0rt3by1atEjvv/++Vq1apcTERN16663atm2b17qsrCxlZWUpLi5O8+bNU05OjiQp\n",

"LS1NBQUFks4+o/L4448rJSVFiYmJWrNmjRYsWHCB2wIAAC1Bo/48efXq1Xr55Ze1bds2PfTQQ5o0\n",

"aZL++9//6s477/T6q574+HitX7++zs9nZ2d7Xb/vvvt03333NWYUAADQgvkcKj169FCHDh00depU\n",

"3XXXXZ73h4wZM0aLFy/2+4AAAODi5XOo5Obmqm/fvuf83r///e8LHggAAOAnPr9H5YsvvvD65Ngj\n",

"R45o0aJFfh0KAABAakSovPrqq2rfvr3nelhYmF599VW/DgUAACA1IlQsy6pzGx9hDwAA7OBzqERE\n",

"ROidd97xXF+2bJkiIiL8OhQAAIDUiDfTvvDCCxo5cqSmT58uSbrsssu0cuVKvw8GAADgc6hcc801\n",

"2r59u3bu3Cnp7Gel8BH2AADADo36wDeHw6HQ0FDV1NTowIEDklTnHD4AAAAXyudQef311zV16lS1\n",

"bt1arVqdfYuLw+FQRUWF34cDAAAXN59D5U9/+pMKCwsVHx9vxzwAAAAePv/VT4cOHYgUAADQJHwO\n",

"lVGjRumFF15QRUWFqqqqPBcAAAB/8/mln1mzZkmSpk2bJofDIcuy5HA4+NA3AADgdz6HypkzZ+yY\n",

"AwAAoA6fX/qRzp6Y8K233pIkHTt2TAcPHvTrUAAAAFIjT0o4ceJEPf3005LOnj35t7/9rb/nAgAA\n",

"8D1UFi5cqA0bNigkJESSFBMTo8OHD/t9MAAAAJ9Dxel0qk2bNl63BQc36gNuAQAAzsvnUOnYsaN2\n",

"7dolh8Mh6ewn1fLx+QAAwA6NOnvy2LFj9fXXXysqKkohISFatWqVHbMBAICLnM+hEhsbq88//1w7\n",

"d+6UZVmcPRkAANjG51Bxu92SpMsvv1ySOHsyAACwjc+h0rdvX88n0v744486ceKEwsLCOHsyAADw\n",

"O59D5X//FHn58uXasmWL3wYCAAD4SaM+mfbn7rrrLr333nv+mAUAAMCLz8+o/PxMybW1tfr88885\n",

"ezIAALCFz6ESGhrqeY9KUFCQunfvrpdeesmO2QAAwEWOsycDAABjXfB7VAAAAOzi8zMqrVq18nx8\n",

"/s9ZliWHw6Ha2lq/DAYAAOBzqMyZM0cnT57UlClTJEkLFixQmzZt9Mgjj/h7NgAAcJHzOVRWrFih\n",

"L774wnP9mWeeUd++fTVr1iy/DgYAAODze1SOHz/u9Sm0FRUVOn78uF+HAgAAkBrxjMof//hHJSUl\n",

"afjw4ZKk999/X08//bS/5wIAAPA9VDIzM3XjjTdq7dq1kqRp06apZ8+efh8MAADA51CRpLCwMCUk\n",

"JGjQoEGqqanRqVOndMkll/h7NgAAcJHz+T0qeXl5GjBggB544AFJUnFxsUaNGuXvuQAAAHwPlblz\n",

"52rTpk0KDQ2VJCUlJWn//v3+ngsAAMD3UAkKClJYWJjXbbzsAwAA7OBzqLRt21aHDh3yfDrthx9+\n",

"qPbt2/t9MAAAAJ/fTPvnP/9Zw4YN0969ezVw4EDt27dP7733nh2zAQCAi5xPoXLmzBnV1tZq7dq1\n",

"+uyzz2RZllJSUjzvVwEAAPAnn0KlVatWysjI0JYtWzRs2DC7ZgIAAJDUiPeodO/eXSUlJXbMAgAA\n",

"4MXn96gcPXpUycnJSklJ0RVXXOG5ffny5X4dDAAAoMGhkpGRoYULF2r8+PFKTU3VlVdeaedcAAAA\n",

"DQ+VoqIiSdL48ePVp08fbdq0ybahAAAApEa8R0WSLMvy9xwAAAB1NPgZlZMnT2rbtm2yLEs//vij\n",

"5+ufJCYm2jIgAAC4ePkUKqmpqZ7rP//a4XBo7969/p0MAABc9BocKqWlpTaOAQAAUFej3qMCAADQ\n",

"FAgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLFsDZXdu3crJSVF\n",

"cXFx6tevn4qLi+tda1mWBg8erNDQUDtHAgAAAcTWUMnMzFRGRoZ27dqlGTNmaMKECfWuff755xUT\n",

"E2PnOAAAIMDYFioVFRUqKirSuHHjJEmjR49WWVmZSkpK6qwtLi7Wu+++q8cee+wXj1tdXa2qqiqv\n",

"S21trd/nBwAAzc+2UCkrK1NERISCg8+e99DhcMjlcsntdnutO336tNLT05WVlaWgoKBfPO7cuXPV\n",

"rl07r8vGjRtt2QMAAGhezf5m2tmzZ+uuu+5Sjx49GrR+5syZqqys9Lr079/f5ikBAEBzCLbrwFFR\n",

"UTp48KBqamoUHBwsy7Lkdrvlcrm81n300Udyu92aP3++ampqVFVVpejoaBUWFqpjx451jut0OuV0\n",

"Or1ua8gzMQAAIPDY9oxKp06d1KdPH+Xm5kqS8vPzFRkZqdjYWK91n3zyifbv36/S0lJ9+umnCgkJ\n",

"UWlp6TkjBQAAXFxsfeknKytLWVlZiouL07x585STkyNJSktLU0FBgZ2/GgAAtAC2vfQjSfHx8Vq/\n",

"fn2d27Ozs8+5Pjo6WseOHbNzJAAAEECa/c20AAAA9SFUAACAsQgVAABgLEIFAAAYi1ABAADGIlQA\n",

"AICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIF\n",

"AAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJU\n",

"AACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxC\n",

"BQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYi\n",

"VAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAs\n",

"QgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsWwNld27dyslJUVxcXHq16+f\n",

"iouL66xZs2aN+vfvr2uvvVY9e/bU9OnTdebMGTvHAgAAAcLWUMnMzFRGRoZ27dqlGTNmaMKECXXW\n",

"XHnllVq6dKm2b9+uL774Qp999pnefPNNO8cCAAABwrZQqaioUFFRkcaNGydJGj16tMrKylRSUuK1\n",

"rnfv3urWrZsk6dJLL1VycrJKS0vrPW51dbWqqqq8LrW1tXZtAwAANCPbQqWsrEwREREKDg6WJDkc\n",

"DrlcLrnd7np/pry8XHl5eRoxYkS9a+bOnat27dp5XTZu3Oj3+QEAQPMz5s20VVVVuuOOOzR9+nRd\n",

"d9119a6bOXOmKisrvS79+/dvwkkBAEBTCbbrwFFRUTp48KBqamoUHBwsy7LkdrvlcrnqrD1+/LiG\n",

"Dh2qkSNHatq0aec9rtPplNPp9LotKCjIr7MDAAAz2PaMSqdOndSnTx/l5uZKkvLz8xUZGanY2Fiv\n",

"dd9//72GDh2qoUOH6oknnrBrHAAAEIBsfeknKytLWVlZiouL07x585STkyNJSktLU0FBgSTpxRdf\n",

"1MaNG7V8+XIlJycrOTlZzz77rJ1jAQCAAGHbSz+SFB8fr/Xr19e5PTs72/P1rFmzNGvWLDvHAAAA\n",

"AcqYN9MCAAD8L0IFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxC\n",

"BQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYi\n",

"VAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADGIlQAAICxCBUAAGAs\n",

"QgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABgLEIFAAAYi1ABAADG\n",

"IlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAAxiJUAACAsQgVAABg\n",

"LEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGItQAQAA\n",

"xiJUAACAsQgVAABgLFtDZffu3UpJSVFcXJz69eun4uLic65bvHixunfvrpiYGKWnp+v06dN2jgUA\n",

"AAKEraGSmZmpjIwM7dq1SzNmzNCECRPqrNm3b5+efPJJffLJJyopKdGhQ4e0cOFCO8cCAAABwrZQ\n",

"qaioUFFRkcaNGydJGj16tMrKylRSUuK1Li8vT6mpqQoPD5fD4dDkyZO1ZMmSeo9bXV2tqqoqr0tt\n",

"ba1d2wAAAM0o2K4Dl5WVKSIiQsHBZ3+Fw+GQy+WS2+1WbGysZ53b7VaXLl0816Ojo+V2u+s97ty5\n",

"czV79myv26655hpNmzbNr/PX1tYqYuNG9e/fX0FBQX49tiRNm/ah34/pq9raWm20cY/NraXfhy39\n",

"/pPsvQ+b+/6TuA8vFPeht7tsOGZtba1uuOEZ2/bXpUsXPfzww+ddY1uo2GXmzJl1osTpdMrpdPr1\n",

"91RVValdu3b64IMPFBIS4tdjm6Kl75H9Bb6WvseWvj+p5e+R/dnPtlCJiorSwYMHVVNTo+DgYFmW\n",

"JbfbLZfL5bXO5XJpz549nuulpaV11vycHVECAADMZNt7VDp16qQ+ffooNzdXkpSfn6/IyEivl32k\n",

"s+9dKSgoUHl5uSzL0oIFC3TvvffaNRYAAAggtv7VT1ZWlrKyshQXF6d58+YpJydHkpSWlqaCggJJ\n",

"Urdu3TR79mzdeOONio2NVceOHZWZmWnnWAAAIEDY+h6V+Ph4rV+/vs7t2dnZXtfT09OVnp5u5yg+\n",

"czqdeuqpp1r0y0wtfY/sL/C19D229P1JLX+P7M9+DsuyrGb77QAAAOfBR+gDAABjESoAAMBYhAoA\n",

"ADAWoQIAAIxFqJxDRUWFrrrqKo0aNeq8a4YOHaru3burV69e+vjjj5tuwEZ65ZVXlJCQoOTkZPXq\n",

"1UsvvfRSvWujo6MVHx+v5ORkJScna9myZU04aeP5sseGnt3bJC+99JJ69eqlhIQEJSYmej6n6FwG\n",

"DRqkrl27eu7D559/vgknbRxf9heIj0FJeu+999S3b185nU498sgj510biI9DX/YXiI9BSTpz5oz+\n",

"8Ic/KCYmRrGxsZo/f369awPlPmzofbF48WJ1795dMTExSk9P1+nTp+0fzkIdo0aNsiZOnGiNHDmy\n",

"3jUPPPCA9dRTT1mWZVkbN260OnfubJ06dappBmykY8eOeb6urKy0oqKirE2bNp1zbZcuXazNmzc3\n",

"0WT+48seb7nlFisnJ8eyLMv65z//aV133XVNMeIFWb16tWePbrfbCgsLs0pKSs659uabb7ZWrFjR\n",

"hNNdOF/2F4iPQcuyrJ07d1pffvmlNWvWLOvhhx8+79pAfBz6sr9AfAxalmW98cYb1uDBg62amhrr\n",

"yJEjlsvlsr766qtzrg2U+7Ah98XevXutiIgI6+DBg9aZM2esO+64w5o/f77ts/GMyv9YvHixunbt\n",

"qptuuum869555x1NnjxZktSvXz9dffXV+uijj5pixEZr166d5+sffvihaUq4iTV0jw09u7dphgwZ\n",

"4tljVFSUwsPDVVZW1sxT+Y8v+wvEx6AkxcXFKSkpyXPC1pamofsL1MegJC1btkzp6ekKCgpS+/bt\n",

"dc8992jJkiXNPVajNfS+yMvLU2pqqsLDw+VwODR58uQm2Teh8jP79u3TggUL9Oyzz5533ZEjR3T6\n",

"9GmFh4d7bvulsz6bIi8vTz179lR0dLQeffRR9e7du961999/vxISEjRp0iQdPny4Cae8MA3Z4/nO\n",

"7h0oVq9ere+++079+vWrd81jjz2mhIQE3XPPPdq7d28TTnfhzre/QH4M+ipQH4e/JJAfg263W126\n",

"dPFc/6V/e6bfhw29L3zdt79cVKFyww03qEOHDue8lJWVaeLEiZo/f77atGnT3KM2yi/tT5LGjBmj\n",

"4uJi7dy5U7m5udq5c+c5j/Xxxx9r69at2rRpkzp06KDx48c35Vbq5c89mqgh+5Okbdu26YEHHtCy\n",

"Zct0+eWXn/NYb731lr7++mtt3bpVN910k0aMGNFU26iXP/dnqobusSFMfBz6c3+maun3YaBpmc89\n",

"1uNcH+f/k8rKSm3dulX33HOPJOn777/XiRMnNGTIEH344Ydea8PCwhQcHKzy8nLP/9H90lmfm8L5\n",

"9ve/oqOjdf3112vVqlWKj4+v8/2f9tK6dWs98sgjiouL89ucF8Jfe2zo2b2bWkP2t337do0YMUKv\n",

"vfaaBg4cWO+6qKgoSWf/7+j3v/+9Hn30UR05ckRhYWF+m9dX/tqfqY9Bybd/o7/ExMehv/Zn6mNQ\n",

"+uU9ulwu7d+/XzfccIOk8//bM/E+/F8NvS9cLpf27Nnjud5Uj7mL6hmV82nXrp2OHDmi0tJSlZaW\n",

"6q9//atuu+22OpHyk7vvvlsLFiyQJBUWFurAgQO6+eabm3Jkn23fvt3z9eHDh7VmzRolJibWWffD\n",

"Dz/o2LFjnutLliw570tEJmnoHht6dm/T7NixQ8OHD9fChQt166231ruupqZGhw4d8lzPz8/XVVdd\n",

"1ayR0hAN3Z8UmI9BXwTy47AhAvUxKJ39t7do0SLV1tbq6NGjWrZsmed/cn8uUO7Dht4Xo0ePVkFB\n",

"gcrLy2VZlhYsWKB7773X/gFtf7tugMrJyfH6q5/CwkJr2LBhnuvl5eXWrbfeasXGxlrXXnuttWbN\n",

"mmaY0jcZGRlWjx49rKSkJCsxMdF65ZVXPN9buXKlNWnSJMuyLGvPnj1WcnKylZCQYPXq1ctKTU21\n",

"9u3b10xT+6ahe7Qsy/r666+tAQMGWN27d7f69u1rbd26tTlG9smvfvUrKzQ01EpKSvJc3n//fcuy\n",

"vP+Nfv/991bfvn2tXr16WYmJidbgwYOtL7/8sjlHb5CG7s+yAvMxaFln/7Kpc+fOVtu2ba0rrrjC\n",

"6ty5s7Vy5UrLslrG47Ch+7OswHwMWpZl1dTUWA8++KDVtWtXq1u3btYLL7zg+V6g3of13ReTJk3y\n",

"3H+WZVkLFy60unXrZnXr1s2aOHFik/ylHSclBAAAxuKlHwAAYCxCBQAAGItQAQAAxiJUAACAsQgV\n",

"AABgLEIFAICLVFOekT0nJ0cOh0PvvvuuTz93UX0yLQAAF6tBgwbp9ddfV3R0tOe2nj17at26dWrX\n",

"rp3KysrUu3dv3XDDDYqJiTnnMZ5//nmNGjXK599dWlqqRYsWacCAAT7/LM+oAABwkfLXGdl3796t\n",

"22+/Xf369VNiYqLmz5/v+d6ZM2eUlpaml19+WU6n0+djEyoAAKDRZ2Svra3V2LFj9be//U2FhYXa\n",

"sGGDFi5cqMLCQknS3//+d914443q27dvo+bipR8AAFqo+++/X1u3bpUklZSUaPjw4brkkkskSe++\n",

"+67nZaCGnpE9KipKlmXplVde0YgRI7R9+3bt3LlTxcXFXuf9OX78uLZv3642bdooPz9fH3/8caP3\n",

"wEfoAwBwETjXe1SksydzHTZsmLKzs3/xZKA/d+mll+rAgQMqLy/XbbfdpgMHDtRZ849//ENz5szx\n",

"vORTXl6ukJAQzZ49W1OmTGnQ7+GlHwAALlL+OCN7fHy8QkJClJOT4/l+SUmJjh49qilTpujgwYMq\n",

"LS1VaWmpBgwYoIULFzY4UiRCBQCAi9bUqVNVWVmpGTNmeP7s+IMPPpAkFRUVafjw4ZKk6upq3X77\n",

"7UpISFBSUpJeffVVFRQUSJKCg4O1atUqLV++XImJierZs6cmTZqkkydP+mVGXvoBAADG4hkVAABg\n",

"LEIFAAAYi1ABAADGIlQAAICxCBUAAGAsQgUAABiLUAEAAMYiVAAAgLEIFQAAYCxCBQAAGOv/AcX+\n",

"EjjcciJyAAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-376ac931-e37d-4c4c-9191-94d7e65c4015\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-376ac931-e37d-4c4c-9191-94d7e65c4015\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_12['Height(Inches)'].plot(kind='hist', bins=20, title='Height(Inches)')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-cf1f6f35-3940-4042-a3cf-85f0089a412e\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAorUlEQVR4nO3df1TVdZ7H8dcNDC35If444CJwAMFUBK7CmJrTzK4rNYWGzo6V\n",

"zaih2NRx59CuRdaetDGc2XTH3bOumI45a2mGOHFss3LMFsdG/BFOaakQiCiIUwpoSoDf/cPTne4K\n",

"yCW+XD74fJzzPYf7/X7v977vF47n6b1fuA7LsiwBAAAY5hZvDwAAANARRAwAADASEQMAAIxExAAA\n",

"ACMRMQAAwEhEDAAAMBIRAwAAjETEAAAAIxExAADASEQMgO/kxRdf1N///d+3e//du3fL4XCoqanJ\n",

"48dqbGxUfHy8ioqKPL5ve7zyyisKCwuz5diSdP/99+uVV16x7fjAzYaIAW5id999t5599tnr1s+a\n",

"NUszZ85s1zGeeeYZvfvuu10y13/9138pOjpaKSkpkqTy8nI5HA6VlJR06uPb5Ze//KWeeuopXb58\n",

"2dujAD0CEQPACFevXtW//du/ad68ed4epcMSEhIUERGhjRs3ensUoEcgYgC06cqVK3rmmWcUHR2t\n",

"fv36aeLEifroo49c259//nlNmDDBdfvs2bOaOnWqgoKCFBUVpVdffVUOh0O7d+92O+7vf/97xcbG\n",

"yt/fX5MmTdLp06clSfPnz1dhYaF+/etfq2/fvurbt68k6dChQzpz5ox+8IMftDrrN29V5eXltXhs\n",

"Sbp8+bKeffZZ1/aoqCht2LDB7Ti5ubmKjIxUYGCgfvzjH6uurs617cKFC3rssccUERGh/v376957\n",

"79Xnn3/u2r5lyxaNGDFCAQEBGjBggP7u7/7O7dipqanKz8+/0WkH0A5EDIA2zZ8/X0VFRfrggw90\n",

"7tw5/cM//IMmT56sCxcutLj/Qw89pObmZpWVlengwYPasmVLi/tt27ZN+/fvV2Vlpb766is988wz\n",

"kqTVq1frrrvu0sKFC3Xx4kVdvHhRknTgwAFFRUWpT58+N5y5tWNL0ty5c/Xuu+/qzTffVF1dnfbs\n",

"2aP4+HjX9urqan322Wf69NNP9dlnn6m4uFjLly+XJFmWpQceeEB1dXX66KOPdObMGcXHx+u+++5T\n",

"Y2OjvvrqK82cOVP/8R//obq6OlVWVro9tiSNGjVK+/fvv+FzAHBjRAxwk3vppZcUFBTktrz22muS\n",

"pC+++EIbNmzQf/7nfyosLEy+vr564oknFBgYqO3bt193rMrKSu3atUu/+tWv1K9fP/Xr109Lly5t\n",

"8XFzcnIUGBiowMBAPfTQQze8WPfLL79UYGBgu55Ta8f+y1/+oldffVWrVq3SHXfcIYfDocGDB8vp\n",

"dLru6+vrq1//+tfq06ePQkNDNXXqVNf9P/roI/3xj39Ubm6ugoOD5efnpxdffFFlZWXat2+fJKlX\n",

"r1769NNP9Ze//EW9e/fWD3/4Q7fZAgMDdf78+XY9DwBtI2KAm9w//dM/6cKFC27LQw89JEmuC2a/\n",

"973vuUXO6dOnVVlZed2xvnnbJiIiwrUuMjKyxccdPHiw6+vbb79d9fX1bc4ZHBys2tradj2n1o5d\n",

"VlYmSYqLi2v1vgMGDFCvXr1avP+JEyfU1NSksLAw17no37+/JOnUqVO67bbbtGPHDu3cuVNxcXGK\n",

"j4/XypUr3Y5fW1urfv36tet5AGibr7cHANB9hYSESJL+/Oc/Kzw8/Ib7/83f/I0k6eTJkxo+fLjr\n",

"a0/dcsv1/78aPXq0Pv/8c125ckW9e/f2+JjSX4Pq+PHjGj16tMf3DwkJ0a233qpz5865hc633XXX\n",

"XbrrrrtkWZY++OADpaamavjw4Zo0aZIk6eOPP9aYMWM6ND8Ad7wSA6BVERERmjp1qh5//HFXjNTX\n",

"1+vtt99WVVXVdfuHhYXp7rvvVnZ2tutVnZZ+VfpGQkJCdPz4cbd1o0ePVmhoqN5///2OPRlJAwcO\n",

"1IMPPqjHH39cx44dkyRVVVXp0KFD7br/hAkTNHLkSD322GOqqamRJJ0/f15bt27VV199perqar3x\n",

"xhu6cOGCHA6HgoKC5HA45Ov71/8v7tixQw888ECHnwOAvyJiALTptdde0+jRozVp0iT5+/srLi5O\n",

"L7/8sizLanV/y7IUERGhpKQkpaWlSZJHr548+eSTOnbsmPr166egoCBJ116d+cUvfqHc3Nzv9Hxe\n",

"fvllff/739c999yjvn37avz48Tpy5Ei77uvj46P33ntPt912m773ve/J399fCQkJ2rZtmxwOhyzL\n",

"0urVqxUVFaW+fftq+vTpWrp0qes3qv785z+rrKxMjzzyyHd6DgCucVit/UsEAJ2guLhYSUlJOnPm\n",

"jEJDQ7/TsRobG5WUlKTf/va3rj94Z5K0tDQ98MADmj17trdHAXoEIgZAp/rkk0/09ddfKzExUWfO\n",

"nNFPf/pTSdKuXbu8PBmAnoa3kwB0qtraWs2YMUP+/v4aPXq0BgwYoFdffdXbYwHogXglBgAAGIlX\n",

"YgAAgJGIGAAAYCQiBgAAGImIAQAARurxEfP/P7cEAAD0DD0+YjryuS0AAKD76/ERAwAAeiYiBgAA\n",

"GImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAA\n",

"gJFsi5grV65o6tSpio2NVUJCgiZNmqSSkpIW992+fbuGDRumoUOHKj09XXV1de3aBgAAbl62vhIz\n",

"b948HTt2TIcPH9aUKVOUkZFx3T4XL17Uo48+qt///vc6ceKEBg8erBdeeOGG2wAAwM3Ntojp3bu3\n",

"7r33XjkcDknS2LFjVV5eft1+b7/9tpKSkjRs2DBJ0s9//nNt2rTphtta0tDQoLq6Orelubm5k58Z\n",

"AADoDny76oFWrlypKVOmXLe+oqJCERERrtuRkZGqqqpSU1NTm9t8fa8fPScnR4sXL3ZbN3bs2E58\n",

"Fn8V+fRbthxXksqX/ci2YwMA0FN0yYW9L774okpKSpSTk2Pr42RnZ6u2ttZtSUlJsfUxAQCAd9ge\n",

"MS+99JLy8/P19ttv67bbbrtue3h4uE6ePOm6XV5ertDQUPn6+ra5rSV+fn4KCAhwW3x8fDr/SQEA\n",

"AK+zNWJWrFihTZs26b333lNQUFCL+6SmpurQoUP67LPPJEmrVq3SjBkzbrgNAADc3Gy7JqayslJP\n",

"PvmkoqKi9IMf/EDStVdK9u3bp3/5l3/R4MGDNX/+fPn7+2vt2rWaOnWqmpqaNHLkSG3YsEGS2twG\n",

"AABubg7LsixvD2GnrKwsrVixotOPy4W9AAB4F3+xFwAAGImIAQAARiJiAACAkYgYAABgJCIGAAAY\n",

"iYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACA\n",

"kYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAA\n",

"GImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAA\n",

"gJFsjZgFCxYoMjJSDodDxcXFLe6zfv16JSYmupYBAwYoPT1dklReXi4fHx+37aWlpXaODAAADOFr\n",

"58GnT5+uhQsXasKECa3uM3v2bM2ePdt1e+TIkXr44Yddt/39/VsNIAAAcPOyNWImTpzo0f779u1T\n",

"TU2N0tLSOvR4DQ0NamhocFvX3NzcoWMBAIDurVtdE7Nu3To98sgj6tWrl2vdpUuXlJycLKfTqSVL\n",

"lrQZJTk5OQoMDHRbioqKumJ0AADQxbpNxFy6dEmbN2/Wo48+6loXGhqq06dPa//+/dq5c6cKCwu1\n",

"fPnyVo+RnZ2t2tpatyUlJaUrxgcAAF2s20TMG2+8oREjRmj48OGudX5+fho0aJAkKTg4WHPmzFFh\n",

"YWGrx/Dz81NAQIDb4uPjY/vsAACg63WbiFm3bp3bqzCSVFNTo8bGRknXrnfJz89XUlKSN8YDAADd\n",

"jK0Rk5mZqbCwMFVWVmry5MmKiYmRJGVkZKigoMC137Fjx1RcXKyf/OQnbvffs2ePkpKSlJCQIKfT\n",

"qZCQEC1atMjOkQEAgCEclmVZ3h7CTllZWVqxYkWnHzfy6bc6/ZjfKF/2I9uODQBAT9Ft3k4CAADw\n",

"BBEDAACMRMQAAAAjETEAAMBIRAwAADASEQMAAIxExAAAACMRMQAAwEhEDAAAMBIRAwAAjETEAAAA\n",

"IxExAADASEQMAAAwEhEDAACMRMQAAAAjETEAAMBIRAwAADASEQMAAIxExAAAACMRMQAAwEhEDAAA\n",

"MBIRAwAAjETEAAAAIxExAADASEQMAAAwEhEDAACMRMQAAAAjETEAAMBIRAwAADASEQMAAIxExAAA\n",

"ACMRMQAAwEhEDAAAMBIRAwAAjETEAAAAI9kaMQsWLFBkZKQcDoeKi4tb3Gf37t3q06ePEhMTXcvl\n",

"y5dd29etW6ehQ4cqOjpac+fOVWNjo50jAwAAQ9gaMdOnT9eePXsUERHR5n5xcXEqLi52LX369JEk\n",

"lZWV6bnnnlNhYaFKSkp09uxZrVmzxs6RAQCAIWyNmIkTJyosLKzD98/Ly1NaWppCQkLkcDg0f/58\n",

"bdq0qdX9GxoaVFdX57Y0Nzd3+PEBAED31S2uiSktLZXT6VRycrJWrVrlWl9RUeH2Kk5kZKQqKipa\n",

"PU5OTo4CAwPdlqKiIltnBwAA3uH1iHE6naqsrNShQ4e0bds2rV69Wlu2bOnQsbKzs1VbW+u2pKSk\n",

"dPLEAACgO/B6xAQEBCgwMFCSFBYWpgcffFCFhYWSpPDwcJ08edK1b3l5ucLDw1s9lp+fnwICAtwW\n",

"Hx8fe58AAADwCq9HTFVVla5evSpJqq+v1/bt25WUlCRJmjZtmgoKClRdXS3LsrR69WrNmDHDm+MC\n",

"AIBuwtaIyczMVFhYmCorKzV58mTFxMRIkjIyMlRQUCBJ2rp1q+Lj45WQkKCxY8dq0qRJmj17tiQp\n",

"KipKixcv1vjx4xUTE6OBAwcqMzPTzpEBAIAhHJZlWd4ewk5ZWVlasWJFpx838um3Ov2Y3yhf9iPb\n",

"jg0AQE/h9beTAAAAOoKIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYA\n",

"ABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIA\n",

"AICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIG\n",

"AAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJFsjZgFCxYoMjJSDodDxcXFLe6z\n",

"a9cupaSkaPjw4RoxYoQWLlyoq1evSpLKy8vl4+OjxMRE11JaWmrnyAAAwBC2Rsz06dO1Z88eRURE\n",

"tLpPv379tHnzZh09elQHDx7U3r179bvf/c613d/fX8XFxa4lOjrazpEBAIAhfO08+MSJE2+4T1JS\n",

"kuvr3r17KzExUeXl5R16vIaGBjU0NLita25u7tCxAABA99atromprq5WXl6e7rvvPte6S5cuKTk5\n",

"WU6nU0uWLGkzSnJychQYGOi2FBUVdcXoAACgi3WbiKmrq9P999+vhQsXasyYMZKk0NBQnT59Wvv3\n",

"79fOnTtVWFio5cuXt3qM7Oxs1dbWui0pKSld9RQAAEAX6hYRU19fr9TUVE2ZMkVZWVmu9X5+fho0\n",

"aJAkKTg4WHPmzFFhYWGrx/Hz81NAQIDb4uPjY/v8AACg63k9Yi5evKjU1FSlpqbq2WefddtWU1Oj\n",

"xsZGSdeud8nPz3e7hgYAANy8bI2YzMxMhYWFqbKyUpMnT1ZMTIwkKSMjQwUFBZKklStXqqioSPn5\n",

"+a5fo166dKkkac+ePUpKSlJCQoKcTqdCQkK0aNEiO0cGAACGcFiWZXl7CDtlZWVpxYoVnX7cyKff\n",

"6vRjfqN82Y9sOzYAAD2F199OAgAA6AgiBgAAGImIAQAARiJiAACAkTyOmHfeeceOOQAAADziccQs\n",

"WbJEcXFxWrlyperq6uyYCQAA4IY8jpg//vGP2rx5sz755BPFxsbq5z//uY4ePWrHbAAAAK3q0DUx\n",

"SUlJevnll7Vjxw5t375do0aN0qRJk/Txxx939nwAAAAt6lDE7Ny5U1OmTFF6eroef/xxVVdXKzMz\n",

"Uw888EBnzwcAANAiX0/vcMcdd2jAgAFasGCB0tPTXR+wOH36dK1bt67TBwQAAGiJxxGzceNGjR49\n",

"usVtb7/99nceCAAAoD08fjvp4MGD+vLLL123v/jiC7388sudOhQAAMCNeBwxq1atUnBwsOt2//79\n",

"tWrVqk4dCgAA4EY8jpiWPvS6ubm5U4YBAABoL48jJjQ0VFu2bHHdfv311xUaGtqpQwEAANyIxxf2\n",

"/uY3v9GUKVO0cOFCSdJtt92mN998s9MHAwAAaIvHETNs2DAdPXpUx44dkyTFxcW5fs0aAACgq3gc\n",

"MZLkcDgUFBSkpqYmnT59WpIUHh7eqYMBAAC0xeOIeeWVV7RgwQL16tVLt9xy7ZIah8OhmpqaTh8O\n",

"AACgNR5HzAsvvKD9+/crLi7OjnkAAADaxePfThowYAABAwAAvM7jiJk6dap+85vfqKamRnV1da4F\n",

"AACgK3n8dtKiRYskSVlZWXI4HLIsSw6Hgz94BwAAupTHEXP16lU75gAAAPCIx28nSdc+BPK///u/\n",

"JUkXLlxQVVVVpw4FAABwIx36AMg5c+bo+eefl3TtU6wfeuihzp4LAACgTR5HzJo1a/SnP/1JAQEB\n",

"kqTo6GidO3eu0wcDAABoi8cR4+fnpz59+rit8/Xt0B/+BQAA6DCPI2bgwIE6fvy4HA6HpGt/wZeP\n",

"HAAAAF2tQ59i/eCDD+qzzz7TkCFDFBAQoO3bt9sxGwAAQKs8jpiYmBjt27dPx44dk2VZfIo1AADw\n",

"Co8jpqKiQpJ0++23SxKfYg0AALzC44gZPXq06y/1XrlyRV999ZX69+/Pp1gDAIAu5XHE/P9fp87P\n",

"z9fhw4c7bSAAAID26NBf7P229PR0vfXWW50xCwAAQLt5HDHf/uTq8+fPa8eOHa1+ivWCBQsUGRkp\n",

"h8Oh4uLiVo+5bt06DR06VNHR0Zo7d64aGxvbtQ0AANy8PI6YoKAg9evXT0FBQRo0aJCysrL07//+\n",

"7y3uO336dO3Zs0cRERGtHq+srEzPPfecCgsLVVJSorNnz2rNmjU33AYAAG5uHkfM1atX1dzcrKtX\n",

"r6qxsVFHjx5Vampqi/tOnDhRYWFhbR4vLy9PaWlpCgkJkcPh0Pz587Vp06YbbmtJQ0OD2ytFdXV1\n",

"am5u9vQpAgAAA3j98wIqKircXqmJjIx0/Rp3W9takpOTo8WLF7utGzt2bCdPDAAdF/m0PdcQli/7\n",

"kS3HxfVM/B6aOHN7ePxKzC233CIfH5/rlm/We1N2drZqa2vdlpSUFK/OBAAA7OHxKzFLlizR5cuX\n",

"9dhjj0mSVq9erT59+ugXv/hFhwYIDw9XaWmp63Z5ebnrD+e1ta0lfn5+8vPzc1vn7bACAAD28PiV\n",

"mG3btmnp0qUKCwtTWFiYfvnLXyo/P1+3336766/4emLatGkqKChQdXW1LMvS6tWrNWPGjBtuAwAA\n",

"NzePI6a+vt7tr/PW1NSovr6+xX0zMzMVFhamyspKTZ48WTExMZKkjIwMFRQUSJKioqK0ePFijR8/\n",

"XjExMRo4cKAyMzNvuA0AANzcPH476cknn1RCQoLuvfdeSdKOHTv0/PPPt7hvbm5ui+vXrl3rdnvu\n",

"3LmaO3dui/u2tQ0AANy8PI6YzMxMjR8/Xu+//74kKSsrSyNGjOj0wQAAANrSoV+x7t+/v+Lj43X3\n",

"3XerqalJX3/9tW699dbOng0AAKBVHl8Tk5eXp7Fjx2r27NmSpCNHjmjq1KmdPRcAAECbPI6YnJwc\n",

"HTp0SEFBQZKkhIQEnTx5srPnAgAAaJPHEePj46P+/fu7reOtJAAA0NU8jhh/f3+dPXtWDodDkvSH\n",

"P/xBwcHBnT4YAABAWzy+sPdXv/qV7rnnHn3++eeaMGGCysrK9NZb9nwmAwAAQGs8iphvPsH6/fff\n",

"1969e2VZlsaNG+e6PgYAAKCreBQxt9xyi+bNm6fDhw/rnnvusWsmAACAG/L4mpihQ4eqpKTEjlkA\n",

"AADazeNrYr788kslJiZq3Lhx6tu3r2t9fn5+pw4GAADQlnZHzLx587RmzRr97Gc/U1pamvr162fn\n",

"XAAAAG1qd8QcOHBAkvSzn/1MTqdThw4dsm0oAACAG/H4mhhJsiyrs+cAAADwSLtfibl8+bI+/vhj\n",

"WZalK1euuL7+xqhRo2wZEAAAoCUeRUxaWprr9re/djgc+vzzzzt3MgAAgDa0O2LKy8ttHAMAAMAz\n",

"HbomBgAAwNuIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgA\n",

"AGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJFsj5sSJExo3\n",

"bpxiY2OVnJysI0eOXLfP+vXrlZiY6FoGDBig9PR0SVJ5ebl8fHzctpeWlto5MgAAMISvnQfPzMzU\n",

"vHnzNGvWLOXl5WnWrFnav3+/2z6zZ8/W7NmzXbdHjhyphx9+2HXb399fxcXFdo4JAAAMZNsrMTU1\n",

"NTpw4IBmzpwpSZo2bZpOnTqlkpKSVu+zb98+1dTUKC0trUOP2dDQoLq6Orelubm5Q8cCAADdm20R\n",

"c+rUKYWGhsrX99qLPQ6HQ+Hh4aqoqGj1PuvWrdMjjzyiXr16udZdunRJycnJcjqdWrJkSZtRkpOT\n",

"o8DAQLelqKio854UAADoNrrNhb2XLl3S5s2b9eijj7rWhYaG6vTp09q/f7927typwsJCLV++vNVj\n",

"ZGdnq7a21m1JSUnpivEBAEAXsy1ihgwZoqqqKjU1NUmSLMtSRUWFwsPDW9z/jTfe0IgRIzR8+HDX\n",

"Oj8/Pw0aNEiSFBwcrDlz5qiwsLDVx/Tz81NAQIDb4uPj04nPCgAAdBe2RcygQYPkdDq1ceNGSdLW\n",

"rVsVFhammJiYFvdft26d26sw0rXrahobGyVdu94lPz9fSUlJdo0MAAAMYuvbSbm5ucrNzVVsbKyW\n",

"LVum9evXS5IyMjJUUFDg2u/YsWMqLi7WT37yE7f779mzR0lJSUpISJDT6VRISIgWLVpk58gAAMAQ\n",

"tv6KdVxcnD788MPr1q9du/a6/err66/bLz093fU3YwAAAL6t21zYCwAA4AkiBgAAGImIAQAARiJi\n",

"AACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQi\n",

"BgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYi\n",

"YgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAk\n",

"IgYAABiJiAEAAEayNWJOnDihcePGKTY2VsnJyTpy5Mh1++zevVt9+vRRYmKia7l8+bJr+7p16zR0\n",

"6FBFR0dr7ty5amxstHNkAABgCFsjJjMzU/PmzdPx48f11FNPadasWS3uFxcXp+LiYtfSp08fSVJZ\n",

"WZmee+45FRYWqqSkRGfPntWaNWvsHBkAABjCtoipqanRgQMHNHPmTEnStGnTdOrUKZWUlLT7GHl5\n",

"eUpLS1NISIgcDofmz5+vTZs2tbp/Q0OD6urq3Jbm5ubv/FwAAED3Y1vEnDp1SqGhofL19ZUkORwO\n",

"hYeHq6Ki4rp9S0tL5XQ6lZycrFWrVrnWV1RUKCIiwnU7MjKyxft/IycnR4GBgW5LUVFRJz4rAADQ\n",

"XXj9wl6n06nKykodOnRI27Zt0+rVq7Vly5YOHSs7O1u1tbVuS0pKSidPDAAAugPbImbIkCGqqqpS\n",

"U1OTJMmyLFVUVCg8PNxtv4CAAAUGBkqSwsLC9OCDD6qwsFCSFB4erpMnT7r2LS8vv+7+3+bn56eA\n",

"gAC3xcfHp7OfGgAA6AZsi5hBgwbJ6XRq48aNkqStW7cqLCxMMTExbvtVVVXp6tWrkqT6+npt375d\n",

"SUlJkq5dR1NQUKDq6mpZlqXVq1drxowZdo0MAAAMYuvbSbm5ucrNzVVsbKyWLVum9evXS5IyMjJU\n",

"UFAg6VrcxMfHKyEhQWPHjtWkSZM0e/ZsSVJUVJQWL16s8ePHKyYmRgMHDlRmZqadIwMAAEP42nnw\n",

"uLg4ffjhh9etX7t2revrJ554Qk888USrx5g7d67mzp1ry3wAAMBcXr+wFwAAoCOIGAAAYCQiBgAA\n",

"GImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAA\n",

"gJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYA\n",

"ABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIA\n",

"AICRiBgAAGAkIgYAABjJ1og5ceKExo0bp9jYWCUnJ+vIkSPX7bNr1y6lpKRo+PDhGjFihBYuXKir\n",

"V69KksrLy+Xj46PExETXUlpaaufIAADAELZGTGZmpubNm6fjx4/rqaee0qxZs67bp1+/ftq8ebOO\n",

"Hj2qgwcPau/evfrd737n2u7v76/i4mLXEh0dbefIAADAELZFTE1NjQ4cOKCZM2dKkqZNm6ZTp06p\n",

"pKTEbb+kpCRFRUVJknr37q3ExESVl5d36DEbGhpUV1fntjQ3N3+n5wEAALon2yLm1KlTCg0Nla+v\n",

"ryTJ4XAoPDxcFRUVrd6nurpaeXl5uu+++1zrLl26pOTkZDmdTi1ZsqTNKMnJyVFgYKDbUlRU1HlP\n",

"CgAAdBvd5sLeuro63X///Vq4cKHGjBkjSQoNDdXp06e1f/9+7dy5U4WFhVq+fHmrx8jOzlZtba3b\n",

"kpKS0lVPAQAAdCHbImbIkCGqqqpSU1OTJMmyLFVUVCg8PPy6fevr65WamqopU6YoKyvLtd7Pz0+D\n",

"Bg2SJAUHB2vOnDkqLCxs9TH9/PwUEBDgtvj4+HTyMwMAAN2BbREzaNAgOZ1Obdy4UZK0detWhYWF\n",

"KSYmxm2/ixcvKjU1VampqXr22WfdttXU1KixsVHStetd8vPzlZSUZNfIAADAILa+nZSbm6vc3FzF\n",

"xsZq2bJlWr9+vSQpIyNDBQUFkqSVK1eqqKhI+fn5rl+jXrp0qSRpz549SkpKUkJCgpxOp0JCQrRo\n",

"0SI7RwYAAIbwtfPgcXFx+vDDD69bv3btWtfXixYtajVM0tPTlZ6ebtt8AADAXN3mwl4AAABPEDEA\n",

"AMBIRAwAADASEQMAAIxExAAAACMRMQAAwEhEDAAAMBIRAwAAjETEAAAAIxExAADASEQMAAAwEhED\n",

"AACMRMQAAAAjETEAAMBIRAwAADASEQMAAIxExAAAACMRMQAAwEhEDAAAMBIRAwAAjETEAAAAIxEx\n",

"AADASEQMAAAwEhEDAACMRMQAAAAjETEAAMBIRAwAADASEQMAAIxExAAAACMRMQAAwEhEDAAAMBIR\n",

"AwAAjETEAAAAIxExAADASEQMAAAwkq0Rc+LECY0bN06xsbFKTk7WkSNHWtxv3bp1Gjp0qKKjozV3\n",

"7lw1Nja2axsAALh52RoxmZmZmjdvno4fP66nnnpKs2bNum6fsrIyPffccyosLFRJSYnOnj2rNWvW\n",

"3HAbAAC4udkWMTU1NTpw4IBmzpwpSZo2bZpOnTqlkpISt/3y8vKUlpamkJAQORwOzZ8/X5s2bbrh\n",

"tpY0NDSorq7ObWlubrbrKQIAAC/ytevAp06dUmhoqHx9rz2Ew+FQeHi4KioqFBMT49qvoqJCERER\n",

"rtuRkZGqqKi44baW5OTkaPHixW7rhg0bpqysrE55Tt+W3ulH/KusrD90ynGam5tVVFSklJQU+fj4\n",

"dMox0TLOddcx/Vzb9W9HZ/278W2mn2u72PE9bG5u1p13/tK2c23Sz903IiIi9I//+I9t7mNbxHhD\n",

"dnb2dcHi5+cnPz8/L03kXXV1dQoMDNQ777yjgIAAb4/To3Guuw7nuutwrrsO57pjbIuYIUOGqKqq\n",

"Sk1NTfL19ZVlWaqoqFB4eLjbfuHh4SotLXXdLi8vd+3T1raW3MzBAgDAzca2a2IGDRokp9OpjRs3\n",

"SpK2bt2qsLAwt7eSpGvXyhQUFKi6ulqWZWn16tWaMWPGDbcBAICbm62/nZSbm6vc3FzFxsZq2bJl\n",

"Wr9+vSQpIyNDBQUFkqSoqCgtXrxY48ePV0xMjAYOHKjMzMwbbgMAADc3h2VZlreHgD0aGhqUk5Oj\n",

"7Oxs3mazGee663Cuuw7nuutwrjuGiAEAAEbiYwcAAICRiBgAAGAkIgYAABiJiAEAAEYiYnqIhoYG\n",

"PfHEExo6dKji4+Ndn1kVGRmpuLg4JSYmKjExUa+//rqXJzVfa+e6tfXouJbO6RdffOH6eU5MTFRs\n",

"bKx8fX315Zdfentco7X28/s///M/cjqdSkxM1MiRI7VhwwYvT2q+1s71jh07NGbMGI0aNUpjx47V\n",

"4cOHvTxp99ejPnbgZvb000/L4XDo+PHjcjgcqq6udm17/fXXlZiY6L3hepjWznVb3wN0TEvntH//\n",

"/iouLnbt89JLL+mDDz5QcHCw9wbtAVo615ZlaebMmdq9e7dGjRql8vJyDRs2TOnp6fL39/f2yMZq\n",

"6VyfP39eDz/8sP73f/9XI0aMUGFhoR5++GF98skn3h63e7NgvIsXL1r+/v5WbW3tddsiIiKsjz76\n",

"qOuH6qFaO9dtfQ/QMe09p8OGDbO2bdvWNUP1UK2d66tXr1rBwcHWBx98YFmWZR0+fNgaPHiw1dDQ\n",

"4I0xe4TWzvX+/futoUOHuq3z9/e3Dh482JXjGYe3k3qA0tJSBQcH68UXX9SYMWN011136Q9/+Osn\n",

"i/70pz9VfHy8Hn30UZ07d86Lk5qvtXN9o+8BPNeec7p3716dP39e9913n5em7BlaO9cOh0Ovv/66\n",

"0tPTFRERoQkTJmjDhg269dZbvT2ysVo710OHDtUXX3yhvXv3SpIKCgpUX1+v8vJy7w7c3Xm7ovDd\n",

"HTx40JJkbdiwwbIsyzp06JDVv39/q7q62jp58qRlWZb19ddfWwsXLrTuueceb45qvNbO9Z/+9KdW\n",

"vwfomLZ+rr8xZ84c65//+Z+9NWKP0da5/v73v+96JaaoqMgKCQmxzp07581xjdbWud61a5c1ceJE\n",

"y+l0Wo8//rg1fPhw68033/TyxN0bEdMDnDt3zrrllluspqYm17oxY8ZY7733ntt+Z86csfr27dvV\n",

"4/UorZ3rN954o13fA7TfjX6u6+vrrb59+1qffvqpt0bsMVo71//6r/963VscY8aMsd59992uHrHH\n",

"aO+/11euXLGCgoKsEydOdPWIRuHtpB5gwIAB+tu//Vu98847kqSysjKVlZXpjjvu0IULF1z7bdq0\n",

"SUlJSV6asmdo7VzfeeedrX4P0DFt/VxL1y5YT0hI0LBhw7w5Zo/Q2rn+8Y9/rKqqKn366aeSpJKS\n",

"EpWWliouLs6b4xqtrZ/rqqoq134vvPCCfvjDHyomJsZbo5rB2xWFzlFaWmrdfffd1siRI61Ro0ZZ\n",

"eXl5VmlpqZWYmGjFx8dbI0eOtNLS0qyysjJvj2q8ls51W+vRcW2d0zvvvNP67W9/68XpepbWzvVr\n",

"r73mWjdy5Ejr1Vdf9fKk5mvtXGdkZFhxcXFWdHS0NXPmTOv8+fPeHdQAfAAkAAAwEm8nAQAAIxEx\n",

"AADASEQMAAAwEhEDAACMRMQAAAAjETEAAMBIRAwAADASEQMAAIxExAAAACMRMQAAwEj/B8Pg481h\n",

"aPE5AAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-cf1f6f35-3940-4042-a3cf-85f0089a412e\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-cf1f6f35-3940-4042-a3cf-85f0089a412e\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_13['Weight(Pounds)'].plot(kind='hist', bins=20, title='Weight(Pounds)')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-ee92c7f7-14ef-45fa-a214-564352694e1a\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAtZklEQVR4nO3df1jUZb7/8dcIRqYCohLkCKwimpr8SDgc3bQfYmalLronUztp\n",

"obidjqeLzmXrMXfTzXC7VldPVx4xXbW1LENaqTYLUzfsh6gtntLVhMRB40dZinoU+fH5/uHVfJsE\n",

"dHCG4Zbn47o+18Xcn3vueb9Vxtc1c898bJZlWQIAADBMO18XAAAA0ByEGAAAYCRCDAAAMBIhBgAA\n",

"GIkQAwAAjESIAQAARiLEAAAAIxFiAACAkQgxAADASIQYAFelU6dO2rFjxxXPv/322/X0008367Fe\n",

"ffVV3Xvvvc26b0spKiqSzWZTSUnJZecuXrxYU6dO9XpNwLWKEAO0IS+88ILCwsL046uNbNu2TTab\n",

"TQsWLHCZm5qaqsmTJ192zTNnzuj222/3WI07duyQzWZTbW2ty/j58+f1n//5n1q4cKFzbOrUqWrf\n",

"vr06deqkzp07q0+fPlq0aJHHavG2xx9/XO+//7727Nnj61IAIxFigDYkJSVFFRUV+vzzz51jeXl5\n",

"GjhwoLZu3eocq6ur0/bt2zVy5EhflNmgDRs2yG63Ky4uzmX8gQce0JkzZ1RVVaXly5dr/vz5Wrt2\n",

"rU9qdFdAQICmTJmiP/7xj74uBTASIQZoQ/r166eIiAjl5eU5x/Ly8vTMM89o7969OnPmjCRp9+7d\n",

"OnnypEaMGKFdu3bp9ttvV9euXRUZGal58+a5vEpis9lcAtCaNWsUHR2tzp07KzU1VY8//vglr9Sc\n",

"Pn1akyZNUlBQkHr27Kn/+Z//kSQ5HA7dc889kqTg4GB16tRJzz33nCRp06ZNuvvuuxvtzWazKSUl\n",

"RQMGDNDevXslSZ988oluu+02denSRT/72c/061//WtXV1Y3WXlJSIpvNpqKiIknS2rVrZbfblZWV\n",

"paioKAUFBemXv/ylqqqqnPcpLi7WXXfdpcDAQN18883avn27S1379u3T8OHDFRwcrC5duujWW2/V\n",

"oUOHnOdHjRqlt95665JXngBcHiEGaGNSUlKcIebEiRM6cOCARo8erfj4eOfelry8PPXv319nzpzR\n",

"XXfdpZkzZ6qiokIffvihcnNz9fvf/77BtT/88EPNnDlTL7zwgk6ePKm0tDT96U9/umTe2rVrlZaW\n",

"pu+//15Lly7V448/rqKiIkVEROjdd9+VJJ08eVJnzpzRf/3Xf0mS9uzZo4EDBzbaV319vd5//319\n",

"8cUXSkpKksPh0IgRIzR+/HhVVFTo/fff11tvvaWnnnrKrT+v8vJyHTx4UP/4xz908OBBFRYWavHi\n",

"xZIuvmJ1//33KyIiQmVlZcrLy9NLL73kcv/HHntMd911l7799lt98803Wr16tYKDg53nBw0apNOn\n",

"T+vgwYNu1QWAEAO0OSNHjtSHH36o6upqffDBB0pOTlaHDh00YsQIZ7jJy8vTyJEj9eKLL+r+++/X\n",

"xIkT5e/vr8jISM2ePVtr1qxpcO2XX35ZY8eO1T333CM/Pz+NHj1ao0ePvmTe+PHjdeedd6pdu3Ya\n",

"P368QkJCnK+eNOa7775TUFDQJeMbN25UcHCwunfvroyMDC1cuFAPPfSQXnnlFcXExOiJJ57Qdddd\n",

"pz59+ujZZ5/VypUrXfYEXY6/v7+ef/55dejQQeHh4Ro3bpwKCgokSZ9++qkOHTqkpUuXqmPHjrLb\n",

"7Zo3b57L/a+77jo5HA4dPXpU/v7+iouL04033ug8/0NP33333RXXBOAiQgzQxtx1112qrq7WRx99\n",

"pLy8PI0YMcI5npeXpzNnzujTTz9VSkqKDh8+rDfffFPBwcHO41e/+pXKy8sbXPv48eOKjIx0GYuK\n",

"irpk3k033eRyu2PHjjp9+nSTdYeEhOjUqVOXjP/Lv/yLTp48qRMnTuiLL77Qk08+KUkqLS1V7969\n",

"XeZGR0fr3Llz+uabb5p8rB/r1q2b2rdv32Ctx44dU5cuXVzC1c9+9jOX+69du1Y2m0133nmn7Ha7\n",

"nnjiCefbdpKcPYWEhFxxTQAuIsQAbUzXrl2VkJCgvLw8lxCTnJys0tJSrV+/XjabTcOHD1dYWJgm\n",

"TZqkkydPOo+qqiqX/4R/rEePHjp69KjL2E9vX067dg0/Ld16663av3//Fa/Ts2dPffXVVy5jxcXF\n",

"6tChg7p37y7p4sfDz5496zz/9ddfu1Wr3W7X999/7xKufvrR6sjISL300ks6evSoduzYoby8PGVm\n",

"ZjrPf/755+rUqZP69evn1mMDIMQAbdLIkSO1bt06nTp1SoMHD5YktW/fXrfddpsWLFigIUOGqGPH\n",

"jnrssceUnZ2tN954QxcuXFBdXZ2Kioq0ZcuWBtd96KGHtHnzZr333nuqq6vTli1b9Ne//tWt2sLC\n",

"wiTJZfOrdPEj3++9994VrzNp0iQdOnRIL7zwgi5cuKDi4mLNmzdPaWlpstlskqTBgwdr7dq1On/+\n",

"vCoqKjR//ny3av2nf/on9enTRxkZGTp79qyOHz+uZ5991mXO2rVrdezYMVmWpcDAQPn7+8vf3995\n",

"fsuWLbrvvvtcxgBcGUIM0AaNHDlSZWVluuOOO1xe+RgxYoTKysqUkpIiSUpMTHRuVu3Ro4e6du2q\n",

"CRMmNPrqyvDhw7V8+XI99thjCg4OVlZWliZPnqzrr7/+imuLiYnRv//7v+uOO+5QcHCw83tfJk+e\n",

"LIfDocLCwitaJzIyUu+//75ef/11hYaG6s4779Q999yj559/3jnnxRdfVHl5ubp166aUlBQ99NBD\n",

"V1yndHG/zFtvvaUjR44oPDxcI0aM0KOPPuoyZ/v27UpKSlKnTp0UGxurf/7nf3ZuLr5w4YL+/Oc/\n",

"KyMjw63HBXCRzXJnhxsAuGncuHG68cYblZWVddVrvfLKK3r11Vf1zjvveKAy31uyZIn27dundevW\n",

"+boUwEiEGAAetWnTJqWkpKhDhw7KycnR5MmTtW3bNg0bNszXpQG4xvAmLACPeuuttzR9+nRduHBB\n",

"kZGR+tOf/kSAAeAVvBIDAACMxMZeAABgJEIMAAAwEiEGAAAYiRADAACMdM2HmGXLlvm6BAAA4AXX\n",

"fIhx97otAADADNd8iAEAANcmQgwAADASIQYAABiJEAMAAIxEiAEAAEYixAAAACMRYgAAgJEIMQAA\n",

"wEiEGAAAYCRCDAAAMBIhBgAAGIkQAwAAjOS1EHP+/HmNGzdOMTExio2NVUpKioqKihqc+/bbb6tf\n",

"v37q06ePUlNTVVVVdUXnAABA2+XVV2JmzJihQ4cOad++fRo7dqzS0tIumXPmzBk9+uij+stf/qLD\n",

"hw/rpptu0u9+97vLngMAAG2b10LM9ddfr9GjR8tms0mSkpOTVVJScsm8d999V/Hx8erXr58k6bHH\n",

"HtOGDRsue64h1dXVqqqqcjnq6uo83BkAAGgN/FvqgZYtW6axY8deMu5wOBQZGem8HRUVpbKyMtXW\n",

"1jZ5zt//0tIzMzM1f/58l7Hk5GQPdvH/Rf36Ha+sK0kli+712toAAFwrWmRj73PPPaeioiJlZmZ6\n",

"9XHmzJmjU6dOuRxJSUlefUwAAOAbXg8xf/jDH5STk6N3331XN9xwwyXnIyIidPToUeftkpIShYeH\n",

"y9/fv8lzDQkICFBgYKDL4efn5/mmAACAz3k1xCxZskQbNmxQXl6egoODG5wzatQoffbZZzp48KAk\n",

"afny5Zo4ceJlzwEAgLbNa3tijh07pieffFK9evXSHXfcIeniKyW7du3Sb37zG910002aOXOmOnfu\n",

"rFWrVmncuHGqra3VwIEDtW7dOklq8hwAAGjbbJZlWb4uwpsyMjK0ZMkSj6/Lxl4AAHyLb+wFAABG\n",

"IsQAAAAjEWIAAICRCDEAAMBIhBgAAGAkQgwAADASIQYAABiJEAMAAIxEiAEAAEYixAAAACMRYgAA\n",

"gJEIMQAAwEiEGAAAYCRCDAAAMBIhBgAAGIkQAwAAjESIAQAARiLEAAAAIxFiAACAkQgxAADASIQY\n",

"AABgJEIMAAAwEiEGAAAYiRADAACMRIgBAABGIsQAAAAjEWIAAICRCDEAAMBIhBgAAGAkQgwAADAS\n",

"IQYAABiJEAMAAIxEiAEAAEYixAAAACMRYgAAgJG8GmJmzZqlqKgo2Ww2FRYWNjhnzZo1iouLcx7d\n",

"unVTamqqJKmkpER+fn4u54uLi71ZMgAAMIS/NxefMGGCZs+erZ///OeNzpk2bZqmTZvmvD1w4EBN\n",

"njzZebtz586NBiAAANB2eTXEDBs2zK35u3btUmVlpcaMGdOsx6uurlZ1dbXLWF1dXbPWAgAArVur\n",

"2hOzevVqPfTQQ2rfvr1z7OzZs0pMTFRCQoIWLFjQZCjJzMxUUFCQy1FQUNASpQMAgBbWakLM2bNn\n",

"9dprr+nRRx91joWHh+v48ePavXu3tm7dqvz8fC1evLjRNebMmaNTp065HElJSS1RPgAAaGGtJsS8\n",

"8cYbGjBggPr37+8cCwgIUGhoqCQpJCREjzzyiPLz8xtdIyAgQIGBgS6Hn5+f12sHAAAtr9WEmNWr\n",

"V7u8CiNJlZWVqqmpkXRxv0tOTo7i4+N9UR4AAGhlvBpi0tPTZbfbdezYMd19992Kjo6WJKWlpSk3\n",

"N9c579ChQyosLNQDDzzgcv+dO3cqPj5esbGxSkhIUFhYmObOnevNkgEAgCFslmVZvi7CmzIyMrRk\n",

"yRKPrxv163c8vuYPShbd67W1AQC4VrSat5MAAADcQYgBAABGIsQAAAAjEWIAAICRCDEAAMBIhBgA\n",

"AGAkQgwAADASIQYAABiJEAMAAIxEiAEAAEYixAAAACMRYgAAgJEIMQAAwEiEGAAAYCRCDAAAMBIh\n",

"BgAAGIkQAwAAjESIAQAARiLEAAAAIxFiAACAkQgxAADASIQYAABgJEIMAAAwEiEGAAAYiRADAACM\n",

"RIgBAABGIsQAAAAjEWIAAICRCDEAAMBIhBgAAGAkQgwAADASIQYAABiJEAMAAIxEiAEAAEYixAAA\n",

"ACN5NcTMmjVLUVFRstlsKiwsbHDOjh071KFDB8XFxTmPc+fOOc+vXr1affr0Ue/evTV9+nTV1NR4\n",

"s2QAAGAIr4aYCRMmaOfOnYqMjGxyXt++fVVYWOg8OnToIEk6cuSI5s2bp/z8fBUVFamiokIrV670\n",

"ZskAAMAQXg0xw4YNk91ub/b9s7OzNWbMGIWFhclms2nmzJnasGFDo/Orq6tVVVXlctTV1TX78QEA\n",

"QOvVKvbEFBcXKyEhQYmJiVq+fLlz3OFwuLyKExUVJYfD0eg6mZmZCgoKcjkKCgq8WjsAAPANn4eY\n",

"hIQEHTt2TJ999pnefPNNrVixQhs3bmzWWnPmzNGpU6dcjqSkJA9XDAAAWgOfh5jAwEAFBQVJkux2\n",

"ux588EHl5+dLkiIiInT06FHn3JKSEkVERDS6VkBAgAIDA10OPz8/7zYAAAB8wuchpqysTPX19ZKk\n",

"06dP6+2331Z8fLwkafz48crNzVV5ebksy9KKFSs0ceJEX5YLAABaCa+GmPT0dNntdh07dkx33323\n",

"oqOjJUlpaWnKzc2VJG3atEm33HKLYmNjlZycrJSUFE2bNk2S1KtXL82fP19Dhw5VdHS0unfvrvT0\n",

"dG+WDAAADGGzLMvydRHelJGRoSVLlnh83ahfv+PxNX9Qsuher60NAMC1wudvJwEAADQHIQYAABiJ\n",

"EAMAAIxEiAEAAEYixAAAACMRYgAAgJEIMQAAwEiEGAAAYCRCDAAAMBIhBgAAGIkQAwAAjESIAQAA\n",

"RiLEAAAAIxFiAACAkQgxAADASIQYAABgJEIMAAAwEiEGAAAYiRADAACMRIgBAABGIsQAAAAjEWIA\n",

"AICRCDEAAMBIhBgAAGAkQgwAADASIQYAABiJEAMAAIxEiAEAAEYixAAAACMRYgAAgJEIMQAAwEiE\n",

"GAAAYCRCDAAAMBIhBgAAGIkQAwAAjOTVEDNr1ixFRUXJZrOpsLCwwTnbtm1TUlKS+vfvrwEDBmj2\n",

"7Nmqr6+XJJWUlMjPz09xcXHOo7i42JslAwAAQ3g1xEyYMEE7d+5UZGRko3O6dOmi1157TQcOHNDe\n",

"vXv18ccf6+WXX3ae79y5swoLC51H7969vVkyAAAwhL83Fx82bNhl58THxzt/vv766xUXF6eSkpJm\n",

"PV51dbWqq6tdxurq6pq1FgAAaN1a1Z6Y8vJyZWdn67777nOOnT17VomJiUpISNCCBQuaDCWZmZkK\n",

"CgpyOQoKClqidAAA0MJaTYipqqrS/fffr9mzZ2vw4MGSpPDwcB0/fly7d+/W1q1blZ+fr8WLFze6\n",

"xpw5c3Tq1CmXIykpqaVaAAAALahVhJjTp09r1KhRGjt2rDIyMpzjAQEBCg0NlSSFhITokUceUX5+\n",

"fqPrBAQEKDAw0OXw8/Pzev0AAKDl+TzEnDlzRqNGjdKoUaP09NNPu5yrrKxUTU2NpIv7XXJyclz2\n",

"0AAAgLbLqyEmPT1ddrtdx44d0913363o6GhJUlpamnJzcyVJy5YtU0FBgXJycpwfo164cKEkaefO\n",

"nYqPj1dsbKwSEhIUFhamuXPnerNkAABgCJtlWZavi/CmjIwMLVmyxOPrRv36HY+v+YOSRfd6bW0A\n",

"AK4VPn87CQAAoDkIMQAAwEiEGAAAYCRCDAAAMJLbIea9997zRh0AAABucTvELFiwQH379tWyZctU\n",

"VVXljZoAAAAuy+0Q89FHH+m1117TF198oZiYGD322GM6cOCAN2oDAABoVLP2xMTHx+ull17Sli1b\n",

"9Pbbb2vQoEFKSUnR559/7un6AAAAGtSsELN161aNHTtWqamp+rd/+zeVl5crPT1dv/jFLzxdHwAA\n",

"QIP83b3DzTffrG7dumnWrFlKTU11XmBxwoQJWr16tccLBAAAaIjbIWb9+vW69dZbGzz37rvvXnVB\n",

"AAAAV8Ltt5P27t2r7777znn7xIkTeumllzxaFAAAwOW4HWKWL1+ukJAQ5+2uXbtq+fLlHi0KAADg\n",

"ctwOMQ1d9Lqurs4jxQAAAFwpt0NMeHi4Nm7c6Lz9+uuvKzw83KNFAQAAXI7bG3uXLl2qsWPHavbs\n",

"2ZKkG264QZs3b/Z4YQAAAE1xO8T069dPBw4c0KFDhyRJffv2dX7MGgAAoKW4HWIkyWazKTg4WLW1\n",

"tTp+/LgkKSIiwqOFAQAANMXtELN27VrNmjVL7du3V7t2F7fU2Gw2VVZWerw4AACAxrgdYn73u99p\n",

"9+7d6tu3rzfqAQAAuCJufzqpW7duBBgAAOBzboeYcePGaenSpaqsrFRVVZXzAAAAaEluv500d+5c\n",

"SVJGRoZsNpssy5LNZuML7wAAQItyO8TU19d7ow4AAAC3uP12knTxIpB//vOfJUknT55UWVmZR4sC\n",

"AAC4nGZdAPKRRx7RM888I+niVawnTZrk6boAAACa5HaIWblypT799FMFBgZKknr37q1vvvnG44UB\n",

"AAA0xe0QExAQoA4dOriM+fs364t/AQAAms3tENO9e3d9+eWXstlski5+gy+XHAAAAC2tWVexfvDB\n",

"B3Xw4EH17NlTgYGBevvtt71RGwAAQKPcDjHR0dHatWuXDh06JMuyuIo1AADwCbdDjMPhkCR17NhR\n",

"kriKNQAA8Am3Q8ytt97q/Kbe8+fP6//+7//UtWtXrmINAABalNsh5qcfp87JydG+ffs8VhAAAMCV\n",

"aNY39v5Yamqq3nnnHU/UAgAAcMXcDjE/vnL1999/ry1btjR6FetZs2YpKipKNptNhYWFja65evVq\n",

"9enTR71799b06dNVU1NzRecAAEDb5XaICQ4OVpcuXRQcHKzQ0FBlZGTov//7vxucO2HCBO3cuVOR\n",

"kZGNrnfkyBHNmzdP+fn5KioqUkVFhVauXHnZcwAAoG1zO8TU19errq5O9fX1qqmp0YEDBzRq1KgG\n",

"5w4bNkx2u73J9bKzszVmzBiFhYXJZrNp5syZ2rBhw2XPNaS6utrllaKqqirV1dW52yIAADCAz68X\n",

"4HA4XF6piYqKcn6Mu6lzDcnMzNT8+fNdxpKTkz1cMRoS9Wvv7YsqWXSv19aG9/FvA/A9b/0e+vp3\n",

"0O1XYtq1ayc/P79Ljh/GfWnOnDk6deqUy5GUlOTTmgAAgHe4/UrMggULdO7cOf3qV7+SJK1YsUId\n",

"OnTQE0880awCIiIiVFxc7LxdUlLi/OK8ps41JCAgQAEBAS5jvg5WAADAO9x+JebNN9/UwoULZbfb\n",

"Zbfb9eyzzyonJ0cdO3Z0fouvO8aPH6/c3FyVl5fLsiytWLFCEydOvOw5AADQtrkdYk6fPu3y7byV\n",

"lZU6ffp0g3PT09Nlt9t17Ngx3X333YqOjpYkpaWlKTc3V5LUq1cvzZ8/X0OHDlV0dLS6d++u9PT0\n",

"y54DAABtm9tvJz355JOKjY3V6NGjJUlbtmzRM8880+DcrKysBsdXrVrlcnv69OmaPn16g3ObOgcA\n",

"ANout0NMenq6hg4dqu3bt0uSMjIyNGDAAI8XBgAA0JRmfcS6a9euuuWWW3T77bertrZWFy5c0HXX\n",

"Xefp2gAAABrl9p6Y7OxsJScna9q0aZKk/fv3a9y4cZ6uCwAAoEluh5jMzEx99tlnCg4OliTFxsbq\n",

"6NGjnq4LAACgSW6HGD8/P3Xt2tVljLeSAABAS3M7xHTu3FkVFRWy2WySpA8++EAhISEeLwwAAKAp\n",

"bm/s/f3vf6977rlHX331lX7+85/ryJEjeucd710bBQAAoCFuhZgfrmC9fft2ffzxx7IsS0OGDHHu\n",

"jwEAAGgpboWYdu3aacaMGdq3b5/uueceb9UEAABwWW7vienTp4+Kioq8UQsAAMAVc3tPzHfffae4\n",

"uDgNGTJEnTp1co7n5OR4tDAAAICmXHGImTFjhlauXKmHH35YY8aMUZcuXbxZFwAAQJOuOMTs2bNH\n",

"kvTwww8rISFBn332mdeKAgAAuBy398RIkmVZnq4DAADALVf8Ssy5c+f0+eefy7IsnT9/3vnzDwYN\n",

"GuSVAgEAABriVogZM2aM8/aPf7bZbPrqq688WxkAAEATrjjElJSUeLEMAAAA9zRrTwwAAICvEWIA\n",

"AICRCDEAAMBIhBgAAGAkQgwAADASIQYAABiJEAMAAIxEiAEAAEYixAAAACMRYgAAgJEIMQAAwEiE\n",

"GAAAYCRCDAAAMBIhBgAAGIkQAwAAjESIAQAARiLEAAAAIxFiAACAkbwaYg4fPqwhQ4YoJiZGiYmJ\n",

"2r9//yVz1qxZo7i4OOfRrVs3paamSpJKSkrk5+fncr64uNibJQMAAEP4e3Px9PR0zZgxQ1OnTlV2\n",

"dramTp2q3bt3u8yZNm2apk2b5rw9cOBATZ482Xm7c+fOKiws9GaZAADAQF57JaayslJ79uzRlClT\n",

"JEnjx49XaWmpioqKGr3Prl27VFlZqTFjxjTrMaurq1VVVeVy1NXVNWstAADQunktxJSWlio8PFz+\n",

"/hdf7LHZbIqIiJDD4Wj0PqtXr9ZDDz2k9u3bO8fOnj2rxMREJSQkaMGCBU2GkszMTAUFBbkcBQUF\n",

"nmsKAAC0Gq1mY+/Zs2f12muv6dFHH3WOhYeH6/jx49q9e7e2bt2q/Px8LV68uNE15syZo1OnTrkc\n",

"SUlJLVE+AABoYV4LMT179lRZWZlqa2slSZZlyeFwKCIiosH5b7zxhgYMGKD+/fs7xwICAhQaGipJ\n",

"CgkJ0SOPPKL8/PxGHzMgIECBgYEuh5+fnwe7AgAArYXXQkxoaKgSEhK0fv16SdKmTZtkt9sVHR3d\n",

"4PzVq1e7vAojXdxXU1NTI+nifpecnBzFx8d7q2QAAGAQr76dlJWVpaysLMXExGjRokVas2aNJCkt\n",

"LU25ubnOeYcOHVJhYaEeeOABl/vv3LlT8fHxio2NVUJCgsLCwjR37lxvlgwAAAzh1Y9Y9+3bV598\n",

"8skl46tWrbpk3unTpy+Zl5qa6vzOGAAAgB9rNRt7AQAA3EGIAQAARiLEAAAAIxFiAACAkQgxAADA\n",

"SIQYAABgJEIMAAAwEiEGAAAYiRADAACMRIgBAABGIsQAAAAjEWIAAICRCDEAAMBIhBgAAGAkQgwA\n",

"ADASIQYAABiJEAMAAIxEiAEAAEYixAAAACMRYgAAgJEIMQAAwEiEGAAAYCRCDAAAMBIhBgAAGIkQ\n",

"AwAAjESIAQAARiLEAAAAIxFiAACAkQgxAADASIQYAABgJEIMAAAwEiEGAAAYiRADAACMRIgBAABG\n",

"IsQAAAAjeTXEHD58WEOGDFFMTIwSExO1f//+S+bs2LFDHTp0UFxcnPM4d+6c8/zq1avVp08f9e7d\n",

"W9OnT1dNTY03SwYAAIbwaohJT0/XjBkz9OWXX+qpp57S1KlTG5zXt29fFRYWOo8OHTpIko4cOaJ5\n",

"8+YpPz9fRUVFqqio0MqVK71ZMgAAMITXQkxlZaX27NmjKVOmSJLGjx+v0tJSFRUVXfEa2dnZGjNm\n",

"jMLCwmSz2TRz5kxt2LCh0fnV1dWqqqpyOerq6q66FwAA0Pp4LcSUlpYqPDxc/v7+kiSbzaaIiAg5\n",

"HI5L5hYXFyshIUGJiYlavny5c9zhcCgyMtJ5OyoqqsH7/yAzM1NBQUEuR0FBgQe7AgAArYXPN/Ym\n",

"JCTo2LFj+uyzz/Tmm29qxYoV2rhxY7PWmjNnjk6dOuVyJCUlebhiAADQGngtxPTs2VNlZWWqra2V\n",

"JFmWJYfDoYiICJd5gYGBCgoKkiTZ7XY9+OCDys/PlyRFRETo6NGjzrklJSWX3P/HAgICFBgY6HL4\n",

"+fl5ujUAANAKeC3EhIaGKiEhQevXr5ckbdq0SXa7XdHR0S7zysrKVF9fL0k6ffq03n77bcXHx0u6\n",

"uI8mNzdX5eXlsixLK1as0MSJE71VMgAAMIhX307KyspSVlaWYmJitGjRIq1Zs0aSlJaWptzcXEkX\n",

"w80tt9yi2NhYJScnKyUlRdOmTZMk9erVS/Pnz9fQoUMVHR2t7t27Kz093ZslAwAAQ/h7c/G+ffvq\n",

"k08+uWR81apVzp8ff/xxPf74442uMX36dE2fPt0r9QEAAHP5fGMvAABAcxBiAACAkQgxAADASIQY\n",

"AABgJEIMAAAwEiEGAAAYiRADAACMRIgBAABGIsQAAAAjEWIAAICRCDEAAMBIhBgAAGAkQgwAADAS\n",

"IQYAABiJEAMAAIxEiAEAAEYixAAAACMRYgAAgJEIMQAAwEiEGAAAYCRCDAAAMBIhBgAAGIkQAwAA\n",

"jESIAQAARiLEAAAAIxFiAACAkQgxAADASIQYAABgJEIMAAAwEiEGAAAYiRADAACMRIgBAABGIsQA\n",

"AAAjEWIAAICRCDEAAMBIXg0xhw8f1pAhQxQTE6PExETt37//kjnbtm1TUlKS+vfvrwEDBmj27Nmq\n",

"r6+XJJWUlMjPz09xcXHOo7i42JslAwAAQ3g1xKSnp2vGjBn68ssv9dRTT2nq1KmXzOnSpYtee+01\n",

"HThwQHv37tXHH3+sl19+2Xm+c+fOKiwsdB69e/f2ZskAAMAQXgsxlZWV2rNnj6ZMmSJJGj9+vEpL\n",

"S1VUVOQyLz4+Xr169ZIkXX/99YqLi1NJSUmzHrO6ulpVVVUuR11d3VX1AQAAWievhZjS0lKFh4fL\n",

"399fkmSz2RQRESGHw9HofcrLy5Wdna377rvPOXb27FklJiYqISFBCxYsaDKUZGZmKigoyOUoKCjw\n",

"XFMAAKDVaDUbe6uqqnT//fdr9uzZGjx4sCQpPDxcx48f1+7du7V161bl5+dr8eLFja4xZ84cnTp1\n",

"yuVISkpqqRYAAEAL8lqI6dmzp8rKylRbWytJsixLDodDERERl8w9ffq0Ro0apbFjxyojI8M5HhAQ\n",

"oNDQUElSSEiIHnnkEeXn5zf6mAEBAQoMDHQ5/Pz8PNwZAABoDbwWYkJDQ5WQkKD169dLkjZt2iS7\n",

"3a7o6GiXeWfOnNGoUaM0atQoPf300y7nKisrVVNTI+nifpecnBzFx8d7q2QAAGAQr76dlJWVpays\n",

"LMXExGjRokVas2aNJCktLU25ubmSpGXLlqmgoEA5OTnOj1EvXLhQkrRz507Fx8crNjZWCQkJCgsL\n",

"09y5c71ZMgAAMIS/Nxfv27evPvnkk0vGV61a5fx57ty5jQaT1NRUpaameq0+AABgrlazsRcAAMAd\n",

"hBgAAGAkQgwAADASIQYAABiJEAMAAIxEiAEAAEYixAAAACMRYgAAgJEIMQAAwEiEGAAAYCRCDAAA\n",

"MBIhBgAAGIkQAwAAjESIAQAARiLEAAAAIxFiAACAkQgxAADASIQYAABgJEIMAAAwEiEGAAAYiRAD\n",

"AACMRIgBAABGIsQAAAAjEWIAAICRCDEAAMBIhBgAAGAkQgwAADASIQYAABiJEAMAAIxEiAEAAEYi\n",

"xAAAACMRYgAAgJEIMQAAwEiEGAAAYCRCDAAAMJJXQ8zhw4c1ZMgQxcTEKDExUfv3729w3urVq9Wn\n",

"Tx/17t1b06dPV01NzRWdAwAAbZdXQ0x6erpmzJihL7/8Uk899ZSmTp16yZwjR45o3rx5ys/PV1FR\n",

"kSoqKrRy5crLngMAAG2b10JMZWWl9uzZoylTpkiSxo8fr9LSUhUVFbnMy87O1pgxYxQWFiabzaaZ\n",

"M2dqw4YNlz3XkOrqalVVVbkcdXV13moRAAD4kL+3Fi4tLVV4eLj8/S8+hM1mU0REhBwOh6Kjo53z\n",

"HA6HIiMjnbejoqLkcDgue64hmZmZmj9/vstYv379lJGR4ZGeJKmurk4FBQUam5QkPz8/j637YxkZ\n",

"H3hlXU/4of+kn/Sf6sXHbC1/Ho313hZcTe/Xwr8N/u7p3fTem/N7eCX9e/N3MDIyUv/xH//R5Byv\n",

"hRhfmDNnziWBJSAgQAEBAR57jKqqKgUFBem9995TYGCgx9Y1RVvun97bZu9S2+6f3ttm75IZ/Xst\n",

"xPTs2VNlZWWqra2Vv7+/LMuSw+FQRESEy7yIiAgVFxc7b5eUlDjnNHWuIZ4OLAAAoPXy2p6Y0NBQ\n",

"JSQkaP369ZKkTZs2yW63u7yVJF3cK5Obm6vy8nJZlqUVK1Zo4sSJlz0HAADaNq9+OikrK0tZWVmK\n",

"iYnRokWLtGbNGklSWlqacnNzJUm9evXS/PnzNXToUEVHR6t79+5KT0+/7DkAANC2eXVPTN++ffXJ\n",

"J59cMr5q1SqX29OnT9f06dMbXKOpc74QEBCg3/72t232bau23D+9t83epbbdP723zd4lM/q3WZZl\n",

"+boIAAAAd3HZAQAAYCRCDAAAMBIhBgAAGIkQAwAAjESI+YlZs2YpKipKNptNhYWFlx2XpL/+9a9K\n",

"SEhQXFycBg4cqHXr1rVs0R7SUI/nz5/XuHHjFBMTo9jYWKWkpLhc/6qyslKjRo1Snz59NHDgQH34\n",

"4Yc+qv7qNaf/adOmOc8NHTpUu3fv9lH1V6c5vf9g27Zt8vPz09KlS1u2aA9pTu+WZemZZ55RTEyM\n",

"brnlFt1xxx0+qv7qNaf/goICJScnKz4+XjfffLOef/55H1V/dRp7Xh85cqQGDRqkuLg43Xbbbfr7\n",

"3//uPHf48GENGTJEMTExSkxM1P79+31Q+dVzt/crfT5ocRZc/O1vf7NKS0utyMhI6+9///tlx+vr\n",

"660uXbpY+/btsyzLso4cOWIFBARYVVVVLVz51Wuox3PnzlnvvPOOVV9fb1mWZb3wwgvW8OHDnfeZ\n",

"Nm2a9dvf/tayLMsqKCiwevToYV24cKGFK/eM5vS/efNmq6amxrIsy3rrrbesyMjIFq7aM5rTu2VZ\n",

"1smTJ63ExETrvvvus/74xz+2bNEe0pzely5dav3iF7+wqqurLcuyrLKyspYu22Oa039sbKy1efNm\n",

"y7Is68SJE1b37t2t/fv3t3TpV62x5/Xvv//e+XNOTo41aNAg5+077rjDWrNmjWVZlvXGG29YgwcP\n",

"bqFqPcvd3q/k+cAXCDGN+OlfbGPj9fX1VkhIiPW3v/3NsizL2rdvn3XTTTc5n9xM1FjvlmVZu3fv\n",

"dvmPumPHji5P4ImJiVZeXp6XK/Qud/r/sW+++cby9/d3hhoTudv7lClTrM2bN1sPP/ywsSHmB+70\n",

"3qNHD+vQoUMtU1gLcaf/uLg4a926dZZlWZbD4bB69OhhdJBrqvc1a9ZYsbGxlmVZVkVFhdW5c2fn\n",

"73h9fb114403WocPH26hSj3vSnv/qaaeC1vSNXUBSF+w2Wx6/fXXlZqaqo4dO+r7779XTk6Orrvu\n",

"Ol+X5hXLli3T2LFjJUknTpxQTU2NwsLCnOcvd6Vx0/24/4bOjR492nnl9mvNT3vPzs5Wu3btNGbM\n",

"GOXk5PiwMu/7ce9VVVWqqKjQ5s2blZ2dLUnKyMjQAw884MsSveqnf/dr1qzR2LFj9fTTT+ubb75R\n",

"VlaWy/PAteBf//VftX37dkkXtwxIUmlpqcLDw52/4zabTREREXI4HJdcUsdkDfX+U009F7aka/PZ\n",

"tgXV1tbq2WefVU5OjoYNG6bdu3drzJgx+vzzz9WtWzdfl+dRzz33nIqKivTBB9679Hpr1lT/69ev\n",

"18aNG43eE9SUn/ZeXl6uZ599Vjt27PBtYS3gp73X1taqtrZW586d065du1RSUqIhQ4aoX79+io2N\n",

"9XG1ntfQv/tFixYpMzNTkyZN0ldffaXhw4dr8ODB6t+/vw8r9ayXX35ZkrRu3To99dRTjf5nfi26\n",

"XO+t6f8CNvZepcLCQn399dcaNmyYJCkxMVF2u91lI9i14A9/+INycnL07rvv6oYbbpAkde3aVf7+\n",

"/iovL3fOu9yVxk3VUP8/eP311zV//nzl5eXpxhtv9FGF3tNQ73v37lVZWZni4uIUFRWl7OxsLViw\n",

"QHPnzvVxtZ7VUO8hISHq1KmTpkyZIuniq48mb+puSkP9f/vtt3rzzTc1adIkSRevcZecnKyPPvrI\n",

"l6V6zcMPP6zt27frxIkT6tmzp8rKylRbWyvp4gZvh8NxTT7nSa69/6Cp50JfIMRcpR/+Uf/jH/+Q\n",

"JBUVFam4uFh9+/b1cWWes2TJEm3YsEF5eXkKDg52OffLX/5SK1askCTt3r1bx48f1/Dhw31Qpfc0\n",

"1f/GjRv19NNPa+vWrdfkE1ljvd97772qqKhQSUmJSkpKNGHCBP3mN7/RwoULfVeshzX19/7ggw9q\n",

"y5YtkqTvvvtOBQUFGjRokA+q9J7G+u/SpYs6duyobdu2SboYanbt2qWBAwf6qFLPOnnypL7++mvn\n",

"7b/85S/q2rWrQkJCFBoaqoSEBK1fv16StGnTJtnt9mvmraSmepea/p3wGV9vymltZsyYYfXo0cPy\n",

"8/OzQkNDrd69ezc5blmW9eqrr1oDBw60Bg0aZA0cONB65ZVXfFX+VWmox9LSUkuS1atXLys2NtaK\n",

"jY21kpKSnPcpLy+3UlJSrOjoaKt///7Wtm3bfNjB1WlO//7+/pbdbneei42Ntb799lsfdtE8zen9\n",

"x0ze2Nuc3r/99lvr/vvvtwYMGGANGDDAevHFF33YwdVpTv95eXlWQkKCNWjQIOvmm2+2Fi9e7MMO\n",

"mq+h3ktKSqzExETnc/pdd93lsvH14MGDVnJystWnTx/r1ltvtf73f//Xdw1cBXd7d+f5oCVxAUgA\n",

"AGAk3k4CAABGIsQAAAAjEWIAAICRCDEAAMBIhBgAAGAkQgwAADASIQYAABiJEAMAAIxEiAEAAEYi\n",

"xAAAACP9P5i171hzAG0QAAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-ee92c7f7-14ef-45fa-a214-564352694e1a\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-ee92c7f7-14ef-45fa-a214-564352694e1a\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x786749325450>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">2-d distributions</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_14.plot(kind='scatter', x='Index', y='Height(Inches)', s=32, alpha=.8)\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-f3875a83-5f0a-42a2-9212-9141606e9061\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAnaklEQVR4nO3df3DU9Z3H8ddmN9lwBAIhkLSpSQDDj5CfEH7EmpPyo4pyyuCP\n",

"eBK1mtqzDlqGcwpM63jXXsnQs3ogtkEHKRpL46lnnbbCDT/8cSogBcovKyVsQrAkRISYBLJkN9/7\n",

"g+mOKYHu4n6zn80+HzM7TXa/bN4fl6XPfPe733VYlmUJAADAEHGRHgAAAOCLiBMAAGAU4gQAABiF\n",

"OAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFOAACAUaIyTlauXBnpEQAAgE2iMk4aGhoiPQIA\n",

"ALBJVMYJAADov4gTAABgFOIEAAAYhTgBAABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGI\n",

"ky/o7PLr03avOrv8kR4FAICY5Yr0ACZoafOqZnu9Nh5o1rkuvwbEOzUnL10VpVlKTXJHejwAAGJK\n",

"zO85aWnz6uENe/TSjmPq8PrkinOow+tTzY4GLfzVHn3a7o30iAAAxJSYj5Oa7fU6crJNw5PcGjow\n",

"QQPdLg0dmKDhSW4dOdmmmg/4kEEAAPpSTMdJZ5dfGw80K9HllMvZ8z+Fyxknt8upNw82cQwKAAB9\n",

"KKbjpN3r07kuvxJcvf9ncLvidO68X+1eXx9PBgBA7IrpOElyuzQg3qnzvu5eb/f6ujUgwakkN8cN\n",

"AwDQV2I6ThLjnbohL02dPr98/p6B4vN3y+vza86EdCXGOyM0IQAAsSfmdwncXZqtHZ7TOnKyTW6X\n",

"U25XnLy+C2GSM2KQKkqzIj0iAAAxJab3nEhSapJbq+8qVsXULCUluuTrtpSU6FLF1Cw9fVcx5zkB\n",

"AKCPxfyeE+lCoCyaPUYPTh+tdq9PSW4XL+UAABAhxMkXJMY7iRIAACIs5l/WAQAAZiFOAACAUYgT\n",

"AABgFOIEAAAYhTgBAABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4\n",

"AQAARiFOAACAUYgTAABgFOIEAAAYhTgBAABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGI\n",

"EwAAYBTiBAAAGMXWOPF6vVq4cKFycnKUn5+viooKSdLGjRtVUlKigoICTZs2TX/84x/tHAMAAEQR\n",

"l513vnTpUjkcDh0+fFgOh0NNTU06ffq0FixYoHfeeUcTJkzQu+++qwULFujAgQN2jgIAAKKEbXHS\n",

"0dGhtWvX6vjx43I4HJKk9PR07dq1S8OGDdOECRMkSWVlZTp27Jh2796tiRMnXnQ/Xq9XXq+3x3V+\n",

"v9+usQEAQITZ9rJOXV2dUlJStHz5cpWUlKisrExbtmxRTk6OTp06pffff1+S9MYbb6itrU319fW9\n",

"3k9VVZWSk5N7XHbu3GnX2AAAIMJsixOfz6eGhgbl5uZq165dWrVqlcrLy9XZ2alXXnlFy5Yt06RJ\n",

"k/S///u/ys3NlcvV+06cZcuWqbW1tcdlypQpdo0NAAAizLaXdTIzMxUXF6cFCxZIkoqLizVy5Ejt\n",

"379fs2bN0je+8Q1JF162SU9PV25ubq/343a75Xa7e1zndDrtGhsAAESYbXtOUlNTNXPmTG3atEmS\n",

"5PF45PF4NH78eJ04cSKw3Y9//GPNmDFDV199tV2jAACAKGLru3Wqq6tVWVmpJUuWKC4uTmvWrFFG\n",

"RoYeeOABvfvuu/L5fCotLdXatWvtHAMAAASps8uvdq9PSW6XEuMj80qFrXEyatQobdu27aLrn3vu\n",

"OTt/LAAACFFLm1c12+u18UCzznX5NSDeqTl56aoozVJqkvvv30EYcYZYAABiXEubVw9v2KOXdhxT\n",

"h9cnV5xDHV6fanY0aOGv9ujTdu/fv5MwIk4AAIhxNdvrdeRkm4YnuTV0YIIGul0aOjBBw5PcOnKy\n",

"TTUfNPTpPMQJAAAxrLPLr40HmpXocsrl7JkFLmec3C6n3jzYpM6uvjsBKnECAEAMa/f6dK7LrwRX\n",

"70ngdsXp3PkLB8n2FeIEAIAYluR2aUC8U+d93b3e7vV1a0CCU0luW99D0wNxAgBADEuMd+qGvDR1\n",

"+vzy+XsGis/fLa/PrzkT0vv0bcV9l0EAAMBId5dma4fntI6cbJPb5ZTbFSev70KY5IwYpIrSrD6d\n",

"hz0nAADEuNQkt1bfVayKqVlKSnTJ120pKdGliqlZevqu4j4/zwl7TgAAgFKT3Fo0e4wenD66f58h\n",

"FgAARJfEeGfEouSveFkHAAAYhTgBAABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAA\n",

"YBTiBAAAGIU4AQAARiFOAACAUYgTAABgFOIEAAAYhTgBAABGIU4AAIBRiBMAAGAU4gQAABiFOAEA\n",

"AEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFOAACAUYgTAABgFOIEAAAYhTgBAABGIU4AAIBRiBMA\n",

"AGAU4gQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFOAACAUYgTAABgFOIEAAAYhTgB\n",

"AABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFOAACAUYgT\n",

"AABgFOIEAAAYxdY48Xq9WrhwoXJycpSfn6+KigpJ0u9//3tNnDhRRUVFysvL0/r16+0cAwAARBGX\n",

"nXe+dOlSORwOHT58WA6HQ01NTbIsSxUVFXrrrbdUUFCg+vp6jRs3TvPnz9egQYPsHAcAAEQB2+Kk\n",

"o6NDa9eu1fHjx+VwOCRJ6enpsixLDodDZ86ckSR9/vnnGjZsmNxud6/34/V65fV6e1zn9/vtGhsA\n",

"AESYbS/r1NXVKSUlRcuXL1dJSYnKysq0ZcsWORwO1dbWav78+crKytK1116r9evXKyEhodf7qaqq\n",

"UnJyco/Lzp077RobAABEmG1x4vP51NDQoNzcXO3atUurVq1SeXm5mpub9R//8R967bXX1NDQoC1b\n",

"tujuu+/Wp59+2uv9LFu2TK2trT0uU6ZMsWtsAAAQYbbFSWZmpuLi4rRgwQJJUnFxsUaOHKkXX3xR\n",

"f/nLX/SP//iPkqTJkyfra1/7mvbs2dPr/bjdbg0ePLjHxel02jU2AACIMNviJDU1VTNnztSmTZsk\n",

"SR6PRx6PR7fffrtOnDihjz76SJJ05MgR1dXVaezYsXaNAgAAooit79aprq5WZWWllixZori4OK1Z\n",

"s0ZZWVl69tlndccddyguLk7d3d1avXq1MjMz7RwFAABECYdlWVakhwjV4sWL9eSTT0Z6DAAAYAPO\n",

"EAsAAIxCnAAAAKMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAnAADAKMQJAAAwCnECAACMQpwAAACj\n",

"ECcAAMAoxAkAADAKcQIAAIxCnAAAAKMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAnAADAKMQJAAAw\n",

"CnECAACMQpwAAMKms8uvT9u96uzyR3oURDFXpAcAAES/ljavarbXa+OBZp3r8mtAvFNz8tJVUZql\n",

"1CR3pMdDlLniPSfnz58P5xwAgCjV0ubVwxv26KUdx9Th9ckV51CH16eaHQ1a+Ks9+rTdG+kREWVC\n",

"ipO33npLd955p4YPH67ExEQlJCRo4sSJWr58uT777DO7ZgQAGKxme72OnGzT8CS3hg5M0EC3S0MH\n",

"Jmh4kltHTrap5oOGSI+IKBN0nNx4441atWqV5s+fr927d8vr9erUqVOqrq6Wz+fTjBkztHHjRjtn\n",

"BQAYprPLr40HmpXocsrl7Pl/KS5nnNwup9482MQxKAhJ0MecrFixQvn5+T2ui4+P15QpUzRlyhQt\n",

"W7ZMHo8n7AMCAMzV7vXpXJdfCa7ef9d1u+J07rxf7V6fEuOdfTwdolXQe07+NkwkybIstbW1SboQ\n",

"KmPGjAnfZAAA4yW5XRoQ79R5X3evt3t93RqQ4FSSm/dfIHghHxBbWVmpM2fO6Pz58yoqKlJaWpp+\n",

"/vOf2zEbAMBwifFO3ZCXpk6fXz5/z0Dx+bvl9fk1Z0I6e00QkpDj5A9/+IOGDBmijRs3qri4WE1N\n",

"TaqurrZjNgBAFLi7NFtXjxiklnavPus4rw6vT591nFdLu1c5IwapojQr0iMiyoQcJ5ZlSZLeffdd\n",

"zZ07V4MHD5bTSREDQKxKTXJr9V3FqpiapaREl3zdlpISXaqYmqWn7yrmPCcIWcgvAqanp+u73/2u\n",

"3nzzTf3gBz9QV1eX/H6OwgaAWJaa5Nai2WP04PTRavf6lOR28VIOrljIe05eeukljR07Vr/+9a81\n",

"ZMgQffLJJ1q8eLEdswEAokxivFOpSW7CBF9KyHGSmpqq8vJydXZ2SpIyMjJ01113hX0wAAAQm0KO\n",

"k1deeUXTpk3Tt771LUnSoUOHNG/evDCPBQAAYlXIcVJVVaXdu3dr6NChkqTCwkI1NHBqYgAAEB4h\n",

"x4nT6dSwYcN6XJeQkBC2gQAAQGwLOU4GDRqk5uZmORwOSdKWLVuUkpIS9sEAAEBsCvmtxCtWrNCc\n",

"OXN09OhRXXvttfJ4PPrd735nx2wAACAGhRwnJSUl2rZtm95//31ZlqVrrrlGQ4YMsWE0AAAQi67o\n",

"k5iSk5M1Z86ccM8CAAAQ+jEnGzdu1Lhx45SQkCCn06m4uDhOXw8AAMIm5D0njzzyiJ5++mmVlpYS\n",

"JQAAIOxCjpPBgwfr+uuvt2MWAACA0F/WmTt3rl5//XUbRgEAAAhhz8nQoUPlcDhkWZZaW1s1YMAA\n",

"ud1uWZYlh8Ohzz77zM45AQBAjAg6Tvbu3WvjGAAAABcEHSdZWVmSpGPHjmnEiBFKTEyUJHV2dqql\n",

"pcWe6QAAQMwJ+ZiT2267rcf3lmVddB0AAMCVCjlOzp8/H9hrIkkDBgyQ1+sN61AAACB2hRwnDodD\n",

"J0+eDHzf1NQky7LCOhQAAIhdV3QSttLSUt19992SpJqaGj3++ONhHwwAAMSmkOPkvvvu08iRI/X7\n",

"3/9ekrRu3TqVlZWFfTAAABCbruiD/6ZPn67p06eHeRQAAIAriJP6+nqtWLFCdXV18vl8geu3bt0a\n",

"1sEAAEBsCjlO7rjjDs2cOVMLFy7kg/8AAEDYhRwnnZ2dqqqqsmMWAACA0N9KnJeXp2PHjtkxCwAA\n",

"QOh7TlpaWlRYWKjS0tIeJ2N77bXXwjoYAACITSHHSUVFhSoqKoLa1uv16l//9V+1adMmJSYmqrCw\n",

"UCtXrtTMmTMD25w9e1ZHjx7VyZMnlZKSEuo4AACgnwk5Tu69996gt126dKkcDocOHz4sh8OhpqYm\n",

"DRs2rMcnHD/xxBN6++23CRMAACAphDhZvHjxZW9/8skne3zf0dGhtWvX6vjx43I4HJKk9PT0i/7c\n",

"2rVrL3uArdfrveize/x+f7BjAwCAKBP0AbHJycmXvfyturo6paSkaPny5SopKVFZWZm2bNnSY5v3\n",

"339fp0+f1ty5cy/5c6uqqi76WTt37gxhiQAAIJo4LJs+tW/37t2aNGmS1q9fr3vuuUd79uzR7Nmz\n",

"dfDgQaWlpUmSKisrNWzYMP30pz+95P30tufkscce08qVK+0YGwAARFjQe0527Nhx2dvPnTunQ4cO\n",

"Bb7PzMxUXFycFixYIEkqLi7WyJEjtX//fklSe3u7Xn75Zd1///2XvV+3263Bgwf3uHDyNwAA+q+g\n",

"4+RnP/uZZs+erXXr1unQoUM6deqUPvnkE23dulXf//73VVpaqubm5sD2qampmjlzpjZt2iRJ8ng8\n",

"8ng8Gj9+vCSptrZWhYWFGjduXJiXBAAAolnQB8S+/PLL+vDDD7VmzRr95Cc/0fHjxzVw4EAVFBTo\n",

"1ltv1XvvvaeBAwf2+DPV1dWqrKzUkiVLFBcXpzVr1igjI0PShQNhH3jggfCuBgAARD3bjjmx0+LF\n",

"iy96dxAAAOgfQj59/UMPPRTUdQAAAFci5DjZvn37Rde9//77YRkGAAAg6GNOamtr9etf/1oej0fz\n",

"588PXN/a2qqkpCRbhgMAALEn6DgZN26cbrnlFu3evVu33HJL4PrBgwf3+KwcAACALyPoOCksLFRh\n",

"YaFuuukmDR8+3M6ZAABADAv5g//i4+O1YsUK1dXVyefzBa5//vnnwzoYAACITSHHyW233abhw4er\n",

"tLSUM7UCAICwCzlOTpw4oc2bN9sxCwAAQOhvJR49erTOnDljwygAAAAh7DlZvHixJOkf/uEfNHHi\n",

"RN1www1KTEwM3M4ZWwEAQDgEHSfJycmB//3rh/cBAACEW9Bx8vjjj9s5BwAAgKQrOCD2Rz/60UXX\n",

"DRkyRKWlpZo8eXJYhgIAALEr5ANiP/roI/3iF79QY2Ojjh8/rurqar311ltasGCBVq1aZceMAAAg\n",

"hoS85+T06dPau3ev0tLSJEnNzc26++67tX37dpWVlemRRx4J+5AAACB2hLzn5Pjx44EwkaS0tDT9\n",

"5S9/UUpKiuLj48M6HAAAiD0hx0lGRob+/d//XY2NjWpsbNSPfvQjffWrX5Xf75fD4bBjRgAAEENC\n",

"jpP169fr4MGDKioqUlFRkQ4cOKBf/vKX6urq0gsvvGDHjAAAIIaEfMxJenq6Xn755V5vy8/P/9ID\n",

"AQCA2BZ0nLz99tu67rrr9MYbb/R6+8033xy2oQAAQOwKOk5qamp03XXX6amnnrroNofDQZwAAICw\n",

"CDpOnnvuOUnStm3bbBsGAAAg5ANifT6ffvazn+mhhx6SJNXV1Wnr1q1hHwwAAMSmkA+IXbhwofx+\n",

"v/7v//5PkjRs2DCVl5dr165dYR8OAADEnpDjZPv27dq7d6+Ki4slXfhcna6urrAPBgAAYlPIL+sk\n",

"Jib2+N7v96u7uztsAwEAgNgWcpwUFBSopqZG3d3dOnLkiP7lX/5F06dPt2E0AAAQi0KOkyeffFLv\n",

"vvuumpqa9PWvf11Op1MrVqywYzYAABCDgj7m5IsnX7vpppt04403SrpwjpPNmzdznhMAABAWQcfJ\n",

"F0++9oc//EElJSWyLEsSJ2EDAADhE3ScfPHka8XFxZzbBAAA2CLkY06kC3tKAAAA7HBFcQIAAGCX\n",

"oF/W2bdvX+Drc+fOaf/+/YFjTqQLbzEGAAD4soKOk1tuuaXH9188ANbhcOjo0aPhmwoAAMSsoOPE\n",

"4/HYOQcAAIAkjjkBAACGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4\n",

"AQAARiFOAACAUYgTAABgFOIEAAAYhTgBAABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGI\n",

"EwAAYBTiBAAAGIU4AQAARiFOAACAUWyNE6/Xq4ULFyonJ0f5+fmqqKi47PUAAAAuO+986dKlcjgc\n",

"Onz4sBwOh5qami57PQAAgG1x0tHRobVr1+r48eNyOBySpPT09EteDwAAINn4sk5dXZ1SUlK0fPly\n",

"lZSUqKysTFu2bLnk9Zfi9Xr1+eef97j4/X67xgYAABFmW5z4fD41NDQoNzdXu3bt0qpVq1ReXq5z\n",

"5871en1zc3Ov91NVVaXk5OQel507d9o1NgAAiDDb4iQzM1NxcXFasGCBJKm4uFgjR45UY2Njr9fv\n",

"37+/1/tZtmyZWltbe1ymTJli19gAACDCbIuT1NRUzZw5U5s2bZIkeTweeTwelZaW9nr9+PHje70f\n",

"t9utwYMH97g4nU67xgYAABFm67t1qqurVVlZqSVLliguLk5r1qxRRkbGJa8HAACwNU5GjRqlbdu2\n",

"BX09AAAAZ4gFAABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAA\n",

"RiFOAACAUYgTAABgFOIEAAAYhTgBAABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAA\n",

"YBTiBAAAGIU4AQAARiFOAACAUYgTAABgFOIEAAAYhTgBAABGIU4AAIBRiBMAAGAU4gQAABiFOAEA\n",

"AEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFOAACAUYgTAABgFOIEAAAYhTgBAABGIU4AAIBRiBMA\n",

"AGAU4gQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFOAACAUYgTAABgFOIEAAAYhTgB\n",

"AABGIU4AAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFOAACAUYgT\n",

"AABgFFvjxOv1auHChcrJyVF+fr4qKiokSdnZ2Ro7dqyKiopUVFSk2tpaO8cAAABRxGXnnS9dulQO\n",

"h0OHDx+Ww+FQU1NT4Lba2loVFRXZ+eMBAEAUsi1OOjo6tHbtWh0/flwOh0OSlJ6ebtePAwAA/YRt\n",

"L+vU1dUpJSVFy5cvV0lJicrKyrRly5bA7ffcc4/y8/NVWVmplpaWS96P1+vV559/3uPi9/vtGhsA\n",

"AESYbXHi8/nU0NCg3Nxc7dq1S6tWrVJ5ebmam5v1zjvvaN++fdq9e7dSU1N17733XvJ+qqqqlJyc\n",

"3OOyc+dOu8YGAAAR5rAsy7Ljjj/99FOlpaXp/PnzcjqdkqTJkyerqqpKs2bNCmx34sQJjRkzRm1t\n",

"bb3ej9frldfr7XHdY489ppUrV9oxNgAAiDDb9pykpqZq5syZ2rRpkyTJ4/HI4/Fo/PjxOnPmTGC7\n",

"DRs2qLi4+JL343a7NXjw4B6Xv8YOAADof2x9t051dbUqKyu1ZMkSxcXFac2aNfJ6vZo7d678fr8s\n",

"y9KoUaP0wgsv2DkGAACIIrbGyahRo7Rt27aLrt+zZ4+dPxYAAEQxzhALAACMQpwAAACjECcAAMAo\n",

"xAkAADAKcQIAAIxCnAAAAKMQJwAAwCjECQAAMApxAgAAjEKcAAAAoxAnAIzR2eXXp+1edXb5Iz0K\n",

"gAiy9bN1ACAYLW1e1Wyv18YDzTrX5deAeKfm5KWrojRLqUnuSI8HoI+x5wRARLW0efXwhj16accx\n",

"dXh9csU51OH1qWZHgxb+ao8+bfdGekQAfYw4ARBRNdvrdeRkm4YnuTV0YIIGul0aOjBBw5PcOnKy\n",

"TTUfNER6RAB9jDgBEDGdXX5tPNCsRJdTLmfPf45czji5XU69ebCJY1CAGEOcAIiYdq9P57r8SnD1\n",

"/k+R2xWnc+f9avf6+ngyAJFEnACImCS3SwPinTrv6+71dq+vWwMSnEpyc+w+EEuIEwARkxjv1A15\n",

"aer0+eXz9wwUn79bXp9fcyakKzHeGaEJAUQCv44AiKi7S7O1w3NaR062ye1yyu2Kk9d3IUxyRgxS\n",

"RWlWpEcE0MfYcwIgolKT3Fp9V7EqpmYpKdElX7elpESXKqZm6em7ijnPCRCD2HOCfqWz68LBk0lu\n",

"Fy8FRJHUJLcWzR6jB6eP5vEDQJygf+AMo/1DYryTKAHAyzqIfpxhFAD6F+IEUY8zjAJA/0KcIKpx\n",

"hlEA6H+IE0Q1zjAKAP0PcYKoxhlGAaD/IU4Q1TjDKAD0P/w6iajHGUYBoH9hzwmiHmcYBYD+hT0n\n",

"6Bc4wygA9B/ECfoVzjAKANGPl3UAAIBRiBMAAGAU4gQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAA\n",

"GIU4AQAARiFOAACAUYgTAABgFIdlWVakhwjV/PnzlZ2dHfb79fv92rlzp6ZMmSKns/+dAr2/r0/q\n",

"/2tkfdGvv6+R9UU/O9eYlZWl733ve393u6iME7t8/vnnSk5OVmtrqwYPHhzpccKuv69P6v9rZH3R\n",

"r7+vkfVFPxPWyMs6AADAKMQJAAAwCnECAACMQpx8gdvt1uOPPy632x3pUWzR39cn9f81sr7o19/X\n",

"yPqinwlr5IBYAABgFPacAAAAoxAnAADAKMQJAAAwCnEi6eTJk0pLS9O8efMuu80NN9ygnJwc5eXl\n",

"6Z133um7Ab+EZ555Rvn5+SoqKlJeXp5WrVp1yW2zs7M1duxYFRUVqaioSLW1tX046ZUJZX1//vOf\n",

"dc0112jMmDGaPHmyDh482IeTXplVq1YpLy9P+fn5KigoUE1NzSW3nT59ukaOHBl4/J566qk+nPTK\n",

"hbLGaHwe/u53v9OkSZPkdru1aNGiy24bjc9BKbQ1RuPzsLu7Ww8//LBGjx6tq6++WqtXr77kttH0\n",

"GAb7WKxdu1Y5OTkaPXq0HnjgAXV1ddk/nAVr3rx51v3332/dcsstl9zmvvvusx5//HHLsixr586d\n",

"VkZGhnX+/Pm+GfBLOHPmTODr1tZW66qrrrJ2797d67ZZWVnWnj17+miy8Ahlfd/4xjesdevWWZZl\n",

"Wf/93/9tlZSU9MWIX8rmzZsDazx27Jg1bNgw68iRI71ue91111n/8z//04fThUcoa4zG5+HHH39s\n",

"7d271/rBD35gfe9737vsttH4HLSs0NYYjc/D9evXWzNmzLB8Pp916tQpKzMz0zpw4ECv20bTYxjM\n",

"Y3H06FHrK1/5inXixAmru7vb+qd/+idr9erVts8W83tO1q5dq5EjR6qsrOyy27388st68MEHJUmT\n",

"J0/WV7/6Vb399tt9MeKXkpycHPi6o6Ojb4q3DwW7vpMnT2rXrl2qqKiQJN16661qbGzUkSNH+mTO\n",

"KzVz5szAGq+66iqlp6ersbExwlOFVyhrjMbn4ZgxY1RYWCiXyxXpUWwT7Bqj9XlYW1urBx54QE6n\n",

"UykpKSovL9eGDRsiPdaXEuxj8corr+jmm29Wenq6HA6HHnzwwT5Ze0zHicfjUXV1tX7yk59cdrtT\n",

"p06pq6tL6enpgeuys7N17Ngxu0cMi1deeUUTJkxQdna2Hn30URUXF19y23vuuUf5+fmqrKxUS0tL\n",

"H0555YJZX2Njo77yla8E/vF0OBzKzMyMmsdQkjZv3qzTp09r8uTJl9xm6dKlys/PV3l5uY4ePdqH\n",

"04XH5dYY7c/DYEXjczBY0fo8PHbsmLKysgLf/72/d9HwGAb7WIS69nDp13FSWlqq1NTUXi+NjY26\n",

"//77tXr1ag0YMCDSo16xv7dGSbrtttt08OBBffzxx6qpqdHHH3/c632988472rdvn3bv3q3U1FTd\n",

"e++9fbmUXoVzfSYKZn2StH//ft13332qra3VwIEDe72vF198UX/605+0b98+lZWVae7cuX21jMsK\n",

"5xpNFOz6gmHic1AK7xpNFAuPYbTpv/sZJX3wwQeXvK21tVX79u1TeXm5JKm9vV1nz57VzJkztWXL\n",

"lh7bDhs2TC6XS01NTYHf2urr65WZmWnf8EG63Br/VnZ2tqZOnarf/va3Gjt27EW3/3U98fHxWrRo\n",

"kcaMGRO2Oa9UuNZ31VVX6cSJE/L5fHK5XLIsS8eOHYv4YxjM+g4dOqS5c+fq+eef17XXXnvJ7a66\n",

"6ipJF34DWrhwoR599FGdOnVKw4YNC9u8VyJcazT1eRjK39G/x8TnoBS+NUbr8zAzM1MNDQ0qLS2V\n",

"dPm/d6Y+hn8r2MciMzNTdXV1ge/76jnXr/ecXE5ycrJOnTql+vp61dfX64knntA3v/nNi8Lkr26/\n",

"/XZVV1dLkj788EN98sknuu666/py5Cty6NChwNctLS3aunWrCgoKLtquo6NDZ86cCXy/YcOGy778\n",

"Y4pg1zdixAhNnDgx8E6QV199VV/72td09dVX99msV+Kjjz7SjTfeqGeffVazZ8++5HY+n0/Nzc2B\n",

"71999VWlpaVFPEyCEewapeh9HgYjWp+DoYjW5+Htt9+u5557Tn6/X5999plqa2sDv9h+UTQ9hsE+\n",

"FrfeeqveeOMNNTU1ybIsVVdX684777R/QNsPuY0S69at6/FunQ8//NCaM2dO4PumpiZr9uzZ1tVX\n",

"X23l5uZaW7dujcCUofvOd75jjR8/3iosLLQKCgqsZ555JnDbb37zG6uystKyLMuqq6uzioqKrPz8\n",

"fCsvL8+6+eabLY/HE6Gpgxfs+izLsv70pz9Z06ZNs3JycqxJkyZZ+/bti8TIIZk1a5Y1ZMgQq7Cw\n",

"MHDZuHGjZVk9/462t7dbkyZNsvLy8qyCggJrxowZ1t69eyM5etCCXaNlRefzcPPmzVZGRoY1aNAg\n",

"KykpycrIyLB+85vfWJbVP56DlhX8Gi0rOp+HPp/Peuihh6yRI0dao0aNsv7rv/4rcFs0P4aXeiwq\n",

"KysDj59lWdazzz5rjRo1yho1apR1//3398k75PhsHQAAYJSYfVkHAACYiTgBAABGIU4AAIBRiBMA\n",

"tsjOztbevXtD+jOPPvqo/u3f/s2WeQBED+IEAAAYhTgBYKvp06fr0UcfVVlZmUaPHh34bBxJOnHi\n",

"hK6//nrl5uZq1qxZOn78eOC2rq4uLV26VFOmTFFRUZHuuOMOnT59Wi0tLcrOztb27dslXfj4gsLC\n",

"Qp07d67P1wZEm778pPN169bJ4XDo9ddfD3nOfn2GWABmqKur07Zt29TV1aXc3Fx98MEHKi0t1SOP\n",

"PKIpU6Zo06ZN+uSTT1RUVKRx48ZJkv7zP/9TAwcO1M6dOyVJP/7xj/XDH/5QzzzzjF588UUtWLBA\n",

"GzZs0KJFi7R169ao/hgKwA7Tp0/XL3/5S2VnZweumzBhgt577z0lJyersbFRxcXFKi0t1ejRo3u9\n",

"j6eeekrz5s0L+WfX19frueee07Rp065odvacALBdeXm5XC6XBgwYoKKiosDpsLds2aJvf/vbkqSM\n",

"jAzdfPPNgT/z+uuvq6amJvBb24YNG+TxeCRJZWVlqqys1DXXXKOf/vSnxp4iHDBNuD7p/M9//rNu\n",

"uukmTZ48WQUFBVq9enXgtu7ubn3729/W008/LbfbfUVzsucEgO0SExMDXzudTvl8vl63czgcga8t\n",

"y9LTTz+tb37zm71uu2fPHg0fPrxffPAcEAnBftL5Y489ptzcXFVVVWnUqFHy+/3653/+Z9XU1Gjc\n",

"uHE6e/aspk2bpqlTp2ry5Ml68skn9fWvf12TJk264tnYcwIgYmbNmqXnn39e0oXjT954443AbfPm\n",

"zdNTTz2ls2fPSpLOnj2rgwcPSpJWr16t06dP649//KPWrFmj9957r++HBwx0zz33BPY27tq1Szfe\n",

"eGPg+/r6+sB2X+aTzj/++GMdPHhQd955p4qKinTNNdeora1Nhw4d0oEDB/Tqq6/qhz/84ZdaB3tO\n",

"AETMypUr9a1vfUu5ubnKyMjQjBkzArctWbJEXq9XU6dODexR+et1TzzxhHbs2KERI0aopqZGFRUV\n",

"+vDDD6Pigw4BO73wwguBr3s75kT68p90blmWUlJSej1VwC9+8QvV19crJydHktTU1KTvfOc7OnHi\n",

"hL773e8GvQ4+WwcAgH6otzj56KOPNGfOHK1Zs0bXX3/9Jf+sz+fTqVOnlJaWJunCpxYvXrxYDQ0N\n",

"8vl8ys/P1/e//33dd999kqQjR44oJSVFKSkpF82waNGikA+q5WUdAABixCOPPKLW1lYtWbIk8HLP\n",

"pk2bJCnwMpAkeb1e3XTTTcrPz1dhYaF+/vOfB152dblc+u1vf6vXXntNBQUFmjBhgiorK8P6dn72\n",

"nAAAAKOw5wQAABiFOAEAAEYhTgAAgFGIEwAAYBTiBAAAGIU4AQAARiFOAACAUYgTAABgFOIEAAAY\n",

"hTgBAABGIU4AAIBR/h809QPlxY0/qwAAAABJRU5ErkJggg==\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-f3875a83-5f0a-42a2-9212-9141606e9061\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-f3875a83-5f0a-42a2-9212-9141606e9061\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_15.plot(kind='scatter', x='Height(Inches)', y='Weight(Pounds)', s=32, alpha=.8)\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-da215588-6571-47a5-b1c0-af9b8fd7a8f5\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAs8ElEQVR4nO3dfVjUdaL//9c4A4MKiuINdUzIlMoQ0LyBbkgtb9sNj2G7GZVt\n",

"LnTjcjp4deOeLbNTsJ1YOrZdbbTnlHVRpm1s25Xl2UDJrAQzwczWGhPvUfKGwJWBGeb3R7+d706C\n",

"zRjD8Kbn47rmWuf9ueHFB9LXfj7vz3wsHo/HIwAAAAP0CnUAAAAAf1FcAACAMSguAADAGBQXAABg\n",

"DIoLAAAwBsUFAAAYg+ICAACMQXEBAADG6HHFZfny5aGOAAAAgqTHFZc9e/aEOgIAAAiSHldcAABA\n",

"z0VxAQAAxqC4AAAAY1BcAACAMSguAADAGBQXAABgDIoLAAAwBsUFAAAYg+ICAACMQXEBAADGoLgA\n",

"QBA1t7r1dZNTza3uUEcBegRbqAMAQE9U3+hUyaZard1+WKda3eodZtWsxFhlpcVpUKQ91PEAY3HG\n",

"BQA6WX2jU79auVUvV+7VSadLtl4WnXS6VFK5R4te2aqvm5yhjggYi+ICAJ2sZFOtHEcaNTjSrgF9\n",

"w9XXbtOAvuEaHGmX40ijSj7iKfbA2aK4AEAnam51a+32w4qwWWWz+v4Va7P2kt1m1Tuf1THnBThL\n",

"FBcA6ERNTpdOtboVbmv/r1e7rZdOtbjV5HR1cTKgZ6C4AEAnirTb1DvMqhZXW7vLna429Q63KtLO\n",

"vRHA2aC4AEAnigizambiUDW73HK5fcuLy90mp8utWZfEKiLMGqKEgNmCWlxyc3MVHx8vi8Wi6upq\n",

"7/j06dOVlJSklJQUXXnlldq6daskqbm5WXPmzFFCQoKSk5M1bdo0ORyOYEYEgE53c1q8Rg6JUn2T\n",

"U8dOtuik06VjJ1tU3+TUqCFRykqLC3VEwFhBLS6ZmZnauHGj4uJ8/yNdvXq1tm3bpurqauXl5WnB\n",

"ggXeZdnZ2dq5c6dqamqUkZGhhQsXBjMiAHS6QZF2PT1/rLImxSkywiZXm0eRETZlTYrT7+eP5XNc\n",

"gB8gqBdZ09PT2x2Pjo72/rmhoUEWi0WSFBERodmzZ3uXpaamqrCwsMP9O51OOZ2+n4fgdjNTH0Do\n",

"DYq0655pCbpj8gVqcroUabdxeQjoBCGbHXbLLbdo/fr1kqS333673XWWL1+ujIyMDvdRUFCgZcuW\n",

"+YylpqZ2XkgA+IEiwqwUFqAThWxy7ksvvaR9+/bp0Ucf1f3333/a8vz8fDkcDhUUFHS4jyVLlqih\n",

"ocHnNXHixGDGBgAAIRTyu4puvfVWrV+/XkePHvWOFRYWqrS0VO+884769OnT4bZ2u139+vXzeVmt\n",

"/D8bAAB6qi4vLidOnNDBgwe979944w3FxMRo4MCBkqSioiKtXLlS7777rs9cGAAAgKDOccnJydGa\n",

"NWtUV1enGTNmKCoqSuXl5Zo3b55OnTqlXr16afDgwXrrrbdksVi0f/9+LV68WCNGjNCUKVMkfXtW\n",

"pbKyMpgxAQCAIYJaXIqLi9sdr6qqand82LBh8ng8wYwEAAAMFvI5LgAAAP6iuAAAAGNQXAAAgDEo\n",

"LgAAwBgUFwAAYAyKCwAAMAbFBQAAGIPiAgAAjEFxAQAAxqC4AAAAY1BcAACAMSguAADAGBQXAABg\n",

"DIoLAAAwBsUFAAAYg+ICAACMQXEBAADGoLgAAABjUFwAAIAxKC4AAMAYFBcAAGAMigsAADAGxQUA\n",

"ABiD4gIAAIxBcQEAAMaguAAAAGNQXAAAgDEoLgAAwBgUFwAAYAyKCwAAMAbFBQAAGIPiAgAAjEFx\n",

"AQAAxqC4AAAAY1BcAACAMSguAADAGBQXAABgDIoLAAAwRlCLS25uruLj42WxWFRdXe0dnz59upKS\n",

"kpSSkqIrr7xSW7du9S778ssvddlllykhIUETJkzQZ599FsyIAADAIEEtLpmZmdq4caPi4uJ8xlev\n",

"Xq1t27apurpaeXl5WrBggXdZTk6OsrOz9cUXX+j+++/3WQYAAH7cglpc0tPTNWzYsNPGo6OjvX9u\n",

"aGiQxWKRJB05ckQff/yxsrKyJEnXX3+99u3bJ4fDEcyYAADAELZQfeFbbrlF69evlyS9/fbbkqR9\n",

"+/bpnHPOkc32bSyLxaLhw4dr7969Gjly5Gn7cDqdcjqdPmNutzvIyQEAQKiEbHLuSy+9pH379unR\n",

"Rx/V/ffff1b7KCgoUP/+/X1eVVVVnZwUAAB0FyG/q+jWW2/V+vXrdfToUZ133nk6dOiQXC6XJMnj\n",

"8Wjv3r0aPnx4u9suWbJEDQ0NPq+JEyd2ZXwAANCFury4nDhxQgcPHvS+f+ONNxQTE6OBAwdqyJAh\n",

"GjdunEpKSiRJr7/+uoYNG9buZSJJstvt6tevn8/LarV2yfcBAAC6XlDnuOTk5GjNmjWqq6vTjBkz\n",

"FBUVpfLycs2bN0+nTp1Sr169NHjwYL311lveCbrFxcVasGCB8vPz1a9fP73wwgvBjAgAAAxi8Xg8\n",

"nlCH6Ex5eXkqKioKdQwAABAEIZ/jAgAA4C+KCwAAMAbFBQAAGIPiAgAAjEFxAQAAxqC4AAAAY1Bc\n",

"AACAMSguAADAGBQXAABgDIoLAAAwBsUFAAAYg+ICAACMQXEBAADGoLgAAABjUFwAAIAxKC4AAMAY\n",

"FBcAAGAMigsAADAGxQUAABiD4gIAAIxBcQEAAMaguAAAAGNQXAAAgDEoLgAAwBgUFwAAYAyKCwAA\n",

"MAbFBQAAGIPiAgAAjEFxAQAAxqC4AAAAY1BcAACAMSguAADAGBQXAABgDIoLAAAwBsUFAAAYg+IC\n",

"AACMQXEBAADGoLgAAABjUFwAAIAxglpccnNzFR8fL4vFourqaklSc3Oz5syZo4SEBCUnJ2vatGly\n",

"OBzebaqqqpSamqqxY8fq4osv1n/9138FMyIAADBIUItLZmamNm7cqLi4OJ/x7Oxs7dy5UzU1NcrI\n",

"yNDChQt9lv3617/W1q1b9cEHH6iwsFA7duwIZkwAAGCIoBaX9PR0DRs2zGcsIiJCs2fPlsVikSSl\n",

"pqaqtrbWu9xisejEiROSpJMnTyo8PFwDBw5sd/9Op1PffPONz8vtdgflewEAAKEX8jkuy5cvV0ZG\n",

"hvf9Cy+8oAcffFDDhw9XQkKC8vPzFRsb2+62BQUF6t+/v8+rqqqqq6IDAIAuFtLikp+fL4fDoYKC\n",

"Au/Yb3/7WxUUFGjv3r367LPP9B//8R8dXipasmSJGhoafF4TJ07sqvgAAKCL2UL1hQsLC1VaWqqy\n",

"sjL16dNHkvT111/rz3/+s1599VVJ0ogRI5SamqoPPvhAo0ePPm0fdrtddrvdZ8xqtQY/PAAACImQ\n",

"nHEpKirSypUr9e677yo6Oto7PmDAAPXt21fr1q2T9G2RqaysVGJiYihiAgCAbiaoZ1xycnK0Zs0a\n",

"1dXVacaMGYqKilJFRYUWL16sESNGaMqUKZK+PXNSWVkpq9Wq1atX695775XL5VJra6vuuecepaWl\n",

"BTMmAAAwRFCLS3FxcbvjHo+nw22uueYabdmyJViRAACAwUJ+VxEAAIC/KC4AAMAYFBcAAGAMigsA\n",

"ADAGxQUAABiD4gIAAIxBcQEAAMaguAAAAGNQXAAAgDEoLgAAwBgUFwAAYAyKCwAAMAbFBQAAGIPi\n",

"AgAAjEFxAQAAxqC4AAAAY1BcAACAMSguAADAGBQXAABgDIoLAAAwxlkVl5aWls7OAQAA8L38Li4V\n",

"FRX6+c9/rsGDBysiIkLh4eEaN26c8vPzdezYsWBmBAAAkORncZk9e7aeeuopzZ07V5988omcTqeO\n",

"Hj2qZ599Vi6XS1OnTtXatWuDnRUAAPzIWTwej+f7Vvr00081ZsyYDpe3trZq9+7dSkhI6NRwZyMv\n",

"L09FRUWhjgEAAILArzMu7ZUWj8ejxsZGSVJYWFi3KC0AAKBnC2hy7u23364TJ06opaVFKSkpGjp0\n",

"qJ555plgZQMAAPARUHHZsmWLoqOjtXbtWo0dO1Z1dXV69tlng5UNAADAR0DF5R/TYd5//3395Cc/\n",

"Ub9+/WS1WoMSDAAA4LsCKi6xsbG688479dprr+maa65Ra2ur3G53sLIBAAD4CKi4vPzyy7rwwgv1\n",

"6quvKjo6WgcOHFBeXl6wsgEAAPjw63Zok3A7NAAAPZfNn5XOP/98WSyWDpd/9dVXnRYIAACgI34V\n",

"l7feekuS9Oqrr6q2tlY5OTmSpD/+8Y+Ki4sLXjoAAIB/4ldxueSSSyRJa9eu1ebNm73jl19+uSZO\n",

"nKhHHnkkOOkAAAD+SUCTcxsaGnTy5Env+5MnT6qhoaHTQwEAALTHrzMu/zB//nylpqbqhhtukCS9\n",

"9tprysrKCkowAACA7wqouDz88MOaMGGC1q1bJ0l6/PHHNWvWrKAEAwAA+K6AioskXXvttbr22muD\n",

"kQUAAOCMAprjUltbqzvvvFPTp0/X1KlTva+O5ObmKj4+XhaLRdXV1ZKk5uZmzZkzRwkJCUpOTta0\n",

"adPkcDi823g8Hj388MNKSEjQmDFjNGXKlLP7zgAAQI8T0BmXG264QVdffbUWLVrk1zOKMjMzdd99\n",

"9+mKK67wGc/OztasWbNksVj09NNPa+HChaqoqJAkPfXUU9q2bZu2b9+u8PBw1dXVBRIRAAD0YAEV\n",

"l+bmZhUUFPi9fnp6+mljERERmj17tvd9amqqCgsLve+feOIJrVu3TuHh4ZK+fT5SR5xOp5xOp88Y\n",

"z04CAKDnCuhSUWJiovbu3dupAZYvX66MjAxJ0jfffKPDhw/rL3/5iyZNmqRJkyZp1apVHW5bUFCg\n",

"/v37+7yqqqo6NR8AAOg+AjrjUl9fr+TkZKWlpSkiIsI7XlpaelZfPD8/Xw6HQ+Xl5ZIkl8sll8ul\n",

"U6dOqbKyUrW1tbrssst00UUXKTk5+bTtlyxZctpDHh988MGzygIAALq/gIpLVlZWp31uS2FhoUpL\n",

"S1VWVqY+ffpIkgYOHKjIyEjv14iPj9fll1+uzZs3t1tc7Ha77Ha7z5g/c28AAICZAiout956a6d8\n",

"0aKiIq1cuVJlZWWKjo72WXbjjTdq7dq1uuuuu3Ts2DFVVVXp3nvv7ZSvCwAAzGbxeDwef1f+xS9+\n",

"0e74888/3+54Tk6O1qxZo7q6OsXExCgqKkoVFRU677zzNGLECEVFRUn69sxJZWWlJOno0aO67bbb\n",

"vE+cvuuuu3TXXXf5/Q3l5eWpqKjI7/UBAIA5Ajrjcumll3r/3NzcrNdff13jxo3rcP3i4uJ2x8/U\n",

"lWJiYvTmm28GEgsAAPxIBFRc7r77bp/3d955p6677rpODQQAANCRgG6H/q6IiAjt37+/s7IAAACc\n",

"UUBnXP751mO3262PP/5YiYmJnR4KAACgPQEVl/79+/+/DW025ebmau7cuZ0eCgAAoD0BFZelS5cG\n",

"KwcAAMD3CmiOS2Njo+6++24lJCQoISFBixYtUmNjY7CyAQAA+AiouNx1111yuVxavXq1XnvtNbW1\n",

"tQX0GSsAAAA/RECXirZt26aamhrv+2eeeabdj+IHAAAIhoDOuLjdbp9LQ01NTXK73Z0eCgAAoD0B\n",

"P6soNTVVP/vZzyRJq1ev1m233RaUYAAAAN8VUHG59957NWbMGJWVlUn69gnPM2fODEowAACA7/Kr\n",

"uDQ0NOjRRx/Vzp07demll+qxxx6T3W4PdjYAAAAffs1xueOOO/TVV19p1qxZ+vDDD/XrX/862LkA\n",

"AABO49cZl23btmn79u2yWCxasGCBrrjiimDnAgAAOI1fZ1zsdrssFoskqXfv3kENBAAA0BG/zrjs\n",

"37/f5wGL+/bt83lfVFTU+ckAAAC+w6/icvfdd5/xPQAAP3bNrW41OV2KtNsUEWYNdZwey6/iwsMV\n",

"AQBoX32jUyWbarV2+2GdanWrd5hVsxJjlZUWp0GR3IHb2fya41JZWXnG5adOndKOHTs6JRAAAKao\n",

"b3TqVyu36uXKvTrpdMnWy6KTTpdKKvdo0Stb9XWTM9QRexy/isvvfvc7TZs2TS+88IJ27Niho0eP\n",

"6sCBA1q3bp3uu+8+paWl6fDhw8HOCgBAt1KyqVaOI40aHGnXgL7h6mu3aUDfcA2OtMtxpFElH+0J\n",

"dcQex69LRatXr9bmzZtVXFysxx57TPv371ffvn2VlJSk66+/Xh988IH69u0b7KwAAHQbza1urd1+\n",

"WBE2q2xW3/MANmsv2W1WvfNZne6YfAFzXjqR3x/5P2HCBE2YMCGYWQAAMEaT06VTrW6F29q/eGG3\n",

"9dKplm8n7FJcOk9AT4e+6667/BoDAKCni7Tb1DvMqhZXW7vLna429Q63KtIe0GMB8T0CKi6bNm06\n",

"bezDDz/stDAAAJgiIsyqmYlD1exyy+X2LS8ud5ucLrdmXRLL2ZZO5lcNXLVqlV599VXt3r1bc+fO\n",

"9Y43NDQoMjIyaOEAAOjObk6LV+Xu43IcaZTdZpXd1ktO17elZdSQKGWlxYU6Yo/jV3G56KKLlJGR\n",

"oU8++UQZGRne8X79+unqq68OWjgAALqzQZF2PT1/rEo+2qN3PqvTqRa3IiNsmnfJMD7HJUgsHo/H\n",

"4+/K9fX1Gjx4cDDz/GB5eXk8ggAA0OX45NyuEdCMobCwMD3++OPatWuXXC6Xd/z555/v9GAAAJgk\n",

"IsxKYekCARWXzMxMDR48WGlpabJa+eEAAICuFVBxOXTokMrKyoKVBQAA4IwCuh36ggsu0IkTJ4IU\n",

"BQAA4Mz8OuOSl5cnSerTp4/GjRunmTNnKiIiwrucybAAAKAr+FVc+vfv7/3fiy++OKiBAAAAOuJX\n",

"cVm6dGmwcwAAAHyvgCbnPvLII6eNRUdHKy0tjQcwAgCAoAtocu7nn3+uP/zhD9q3b5/279+vZ599\n",

"VhUVFbrpppv01FNPBSsjAACApADPuBw/flzV1dUaOnSoJOnw4cO6+eabtWnTJl155ZXKzc0NSkgA\n",

"AAApwDMu+/fv95YWSRo6dKgOHjyogQMHKiwsrNPDAQAA/LOAisu//Mu/aNmyZdq3b5/27dunRx55\n",

"ROeee67cbrcsFstp6+fm5io+Pl4Wi0XV1dWSpObmZs2ZM0cJCQlKTk7WtGnT5HA4Ttt23bp1slqt\n",

"+u///u+z+sYAAEDPE1BxefHFF/XZZ58pJSVFKSkp2r59u1asWKHW1la99NJLp62fmZmpjRs3Ki7O\n",

"97He2dnZ2rlzp2pqapSRkaGFCxf6LG9oaNADDzyg2bNnn8W3BAAAeqqA5rjExsZq9erV7S4bM2bM\n",

"aWPp6emnjUVERPgUktTUVBUWFvqss2jRIv3mN79RaWnpGfM4nU45nU6fMbfbfcZtAACAufwqLu+9\n",

"956uuuoqvfnmm+0uv+666846wPLly5WRkeF9/6c//Um9evXSdddd973FpaCgQMuWLfMZS01NPess\n",

"AACge/OruJSUlOiqq67Sk08+edoyi8Vy1sUlPz9fDodD5eXlkqS6ujo9+uijqqio8Gv7JUuWeB9H\n",

"8A8PPvjgWWUBAADdn1/F5Y9//KMkaf369Z32hQsLC1VaWqqysjL16dNHkrRlyxYdOnRIKSkpkqSv\n",

"v/5ab775purr6/XYY4+dtg+73S673e4zZrVaOy0jAADoXgKa4+JyubR8+XLt2rVLzzzzjHbt2qU9\n",

"e/Zo6tSpAX3RoqIirVy5UmVlZYqOjvaOX3vttTp8+LD3/YIFC5SSkqJ77rknoP0DAICeKaC7ihYt\n",

"WqS//e1v3jMvMTExuu+++zpcPycnR8OGDdP+/fs1Y8YMjRw5Uvv379fixYt14sQJTZkyRSkpKZo0\n",

"adIP+y4AAMCPQkBnXDZt2qTq6mqNHTtW0rfPKWptbe1w/eLi4nbHPR6PX19vxYoVgcQDAAA9XEBn\n",

"XCIiInzeu91utbW1dWogAACAjgRUXJKSklRSUqK2tjY5HA7dcccdmjx5cpCiAQAA+PKruCxdulQb\n",

"NmzQk08+qffff191dXW6/PLLZbFY9Nvf/jbYGQEAACT5OcflyJEjys7O1r59+5SWlqbc3FxNnTpV\n",

"EydO5PZjAADQZfw64/KHP/xBf/vb3+RwOHT77bdr7969WrBggQYMGKBrr7022BkBAAAkBXhX0Tnn\n",

"nKPrr79e55xzjmJjY7Vy5UrvU58BAACCza/ismHDBlVUVGj9+vU6cOCAUlNTlZ6erjVr1mjUqFHB\n",

"zggAACDJz+IyefJkpaam6qGHHtLMmTODnQkAAKBdfs1x2bBhg2bPnq3CwkKNHDlS8+fP13PPPacv\n",

"vvgi2PkAAAC8LB5/P8b2/9fS0qLKykqtX79er7zyipqamrR///5g5QtYXl6eioqKQh0DAAAEQUCT\n",

"cw8ePKj169eroqJC69at05EjR3TFFVcEKxsAAIAPv4rLL3/5S7333ns6ePCg0tLSNGXKFJWUlGjC\n",

"hAmy2QLqPgAAAGfNr9Zx3nnn6X//93+VmpqqsLCwYGcCAABol1/F5aGHHgp2DgAAgO8V0EMWAQAA\n",

"QoniAgAAjEFxAQAAxqC4AAAAY1BcAACAMSguAADAGBQXAABgDIoLAAAwBsUFAAAYg+ICAACMQXEB\n",

"AADGoLgAAABjUFwAAIAxKC4AAMAYFBcAAGAMigsAADAGxQUAABiD4gIAAIxBcQEAAMaguAAAAGNQ\n",

"XAAAgDEoLgAAwBgUFwAAYAyKCwAAMEZQi0tubq7i4+NlsVhUXV0tSWpubtacOXOUkJCg5ORkTZs2\n",

"TQ6Hw7vNbbfd5l12+eWXa/PmzcGMCAAADBLU4pKZmamNGzcqLi7OZzw7O1s7d+5UTU2NMjIytHDh\n",

"Qu+yf/3Xf9WOHTtUU1OjJUuWaN68ecGMCAAADBLU4pKenq5hw4b5jEVERGj27NmyWCySpNTUVNXW\n",

"1nqXX3fddbLZbN5lBw4ckMvlanf/TqdT33zzjc/L7XYH55sBAAAhF/I5LsuXL1dGRkaHy2bPnu0t\n",

"Mt9VUFCg/v37+7yqqqqCGRcAAIRQSItLfn6+HA6HCgoKTltWUlKi1atX67nnnutw+yVLlqihocHn\n",

"NXHixGBGBgAAIdT+qYwuUFhYqNLSUpWVlalPnz4+y1atWqVly5apvLxcQ4cO7XAfdrtddrvdZ8xq\n",

"tQYlLwAACL2QFJeioiKtXLlSZWVlio6O9lm2evVq/eY3v1FZWZmGDx8eingAAKCbsng8Hk+wdp6T\n",

"k6M1a9aorq5OMTExioqKUkVFhc477zyNGDFCUVFRkr49c1JZWSlJCgsLU2xsrGJiYrz7KS8v93l/\n",

"Jnl5eSoqKur8bwYAAIRcUM+4FBcXtzt+pq7U2toarDgAAMBwIb+rCAAAwF8UFwAAYAyKCwAAMAbF\n",

"BQAAGIPiAgAAjEFxAQAAxqC4AAAAY1BcAACAMSguAADAGBQXAABgDIoLAAAwBsUFAAAYg+ICAACM\n",

"QXEBAADGoLgAAABjUFwAAIAxKC4AAMAYFBcAAGAMigsAADAGxQUAABiD4gIAAIxBcQEAAMaguAAA\n",

"AGNQXAAAgDEoLgAAwBgUFwAAYAyKCwAAMAbFBQAAGIPiAgAAjEFxAQAAxqC4AAAAY1BcAACAMSgu\n",

"fmpudevrJqeaW92hjgIAwI+WLdQBurv6RqdKNtVq7fbDOtXqVu8wq2YlxiorLU6DIu2hjgcAwI8K\n",

"Z1zOoL7RqV+t3KqXK/fqpNMlWy+LTjpdKqnco0WvbNXXTc5QRwQA4EeF4nIGJZtq5TjSqMGRdg3o\n",

"G66+dpsG9A3X4Ei7HEcaVfLRnlBHBADgR4Xi0oHmVrfWbj+sCJtVNqvvYbJZe8lus+qdz+qY8wIA\n",

"QBeiuHSgyenSqVa3wm3tHyK7rZdOtbjV5HR1cTIAAH68glpccnNzFR8fL4vFourqaklSc3Oz5syZ\n",

"o4SEBCUnJ2vatGlyOBzebY4cOaKZM2dq1KhRSkxM1IYNG4IZsUORdpt6h1nV4mprd7nT1abe4VZF\n",

"2pnfDABAVwlqccnMzNTGjRsVFxfnM56dna2dO3eqpqZGGRkZWrhwoXfZAw88oNTUVH355Zd64YUX\n",

"NH/+fLW2tgYzZrsiwqyamThUzS63XG7f8uJyt8npcmvWJbGKCLN2eTYAAH6sglpc0tPTNWzYMJ+x\n",

"iIgIzZ49WxaLRZKUmpqq2tpa7/LVq1frjjvukCRNmDBB5557rt57771gxuzQzWnxGjkkSvVNTh07\n",

"2aKTTpeOnWxRfZNTo4ZEKSst7vt3AgAAOk3Ir3MsX75cGRkZkqSjR4+qtbVVsbGx3uXx8fHau3dv\n",

"u9s6nU45nb63JLvdnTdZdlCkXU/PH6uSj/bonc/qdKrFrcgIm+ZdMozPcQEAIARCWlzy8/PlcDhU\n",

"Xl5+VtsXFBRo2bJlPmOpqamdEc1rUKRd90xL0B2TL1CT06VIu43LQwAAhEjI7ioqLCxUaWmp3nnn\n",

"HfXp00eSFBMTI5vNprq6Ou96tbW1Gj58eLv7WLJkiRoaGnxeEydODEreiDCrBkXaKS0AAIRQSIpL\n",

"UVGRVq5cqXfffVfR0dE+y+bNm6dnn31WkrR582YdOHBAV111Vbv7sdvt6tevn8/LaqVYAADQUwX1\n",

"UlFOTo7WrFmjuro6zZgxQ1FRUaqoqNDixYs1YsQITZkyRdK3BaSyslKS9Pjjj+vmm2/WqFGjFB4e\n",

"rpKSEoWFhQUzJgAAMERQi0txcXG74x6Pp8Nthg4dqr/+9a/BigQAAAzGJ+cCAABjUFwAAIAxKC4A\n",

"AMAYFBcAAGAMigsAADAGxQUAABiD4gIAAIxBcQEAAMaguAAAAGNQXAAAgDEoLgAAwBgUFwAAYAyK\n",

"CwAAMAbFBQAAGIPiAgAAjEFxAQAAxqC4AAAAY1BcAACAMSguAADAGBQXAABgDIoLAAAwBsUFAAAY\n",

"g+ICAACMQXEBAADGoLgAAABjUFwAAIAxKC4AAMAYFBcAAGAMigsAADAGxQUAABiD4gIAAIxBcQmy\n",

"5la3vm5yqrnVHeooAAAYzxbqAD1VfaNTJZtqtXb7YZ1qdat3mFWzEmOVlRanQZH2UMcDAMBInHEJ\n",

"gvpGp361cqtertyrk06XbL0sOul0qaRyjxa9slVfNzlDHREAACNRXIKgZFOtHEcaNTjSrgF9w9XX\n",

"btOAvuEaHGmX40ijSj7aE+qIAAAYieLSyZpb3Vq7/bAibFbZrL6H12btJbvNqnc+q2POCwAAZ4Hi\n",

"0smanC6danUr3Nb+obXbeulUi1tNTlcXJwMA4IfpDjecMDm3k0XabeodZtVJp0t925mD63S1KTLC\n",

"pkg7hx4AYIbudMMJZ1w6WUSYVTMTh6rZ5ZbL3eazzOVuk9Pl1qxLYhURZg1RQgAA/NfdbjgJanHJ\n",

"zc1VfHy8LBaLqqurv3dckt5++22NGzdOKSkpSkxM1IsvvhjMiEFxc1q8Rg6JUn2TU8dOtuik06Vj\n",

"J1tU3+TUqCFRykqLC3VEAAD80t1uOAlqccnMzNTGjRsVFxfn17jH41FWVpZWrFih6upqvfXWW8rJ\n",

"yVFjY2MwY3a6QZF2PT1/rLImxSkywiZXm0eRETZlTYrT7+eP5XNcAABG6I43nAR1okV6enpA45Jk\n",

"sVh04sQJSdI333yjmJgY2e3t/0PvdDrldPqeonK7u8fdOoMi7bpnWoLumHyBmpwuRdptXB4CABgl\n",

"kBtOuurfuG41Q9RisWjVqlWaO3eu+vbtq+PHj6u0tFTh4eHtrl9QUKBly5b5jKWmpnZFVL9FhFkp\n",

"LAAAI3XHG0661eRcl8ulRx99VKWlpdqzZ4/Ky8t188036+uvv253/SVLlqihocHnNXHixC5ODQBA\n",

"z9QdbzjpVsWlurpaBw8e9F5KmjBhgoYNG6atW7e2u77dble/fv18XlYrZzcAAOgs3e2Gk25VXM47\n",

"7zwdOnRIn3/+uSTJ4XBo165duvDCC0OcDACAH6fudsNJUC9K5eTkaM2aNaqrq9OMGTMUFRUlh8PR\n",

"4fjQoUP13HPP6YYbblCvXr3U1tamp59+WsOHDw9mTAAAcAbd6YYTi8fj8YTkKwdJXl6eioqKQh0D\n",

"AAAEQbe6VAQAAHAmFBcAAGAMigsAADAGxQUAABiD4gIAAIxBcQEAAMaguAAAAGNQXAAAgDEoLgAA\n",

"wBgUFwAAYIwe95H/c+fOVXx8fKhjhITb7VZVVZUmTpzIU7KDjGPddTjWXYdj3XU41qeLi4vTv/3b\n",

"v33vej2uuPyYffPNN+rfv78aGhrUr1+/UMfp0TjWXYdj3XU41l2HY332uFQEAACMQXEBAADGoLgA\n",

"AABjUFx6ELvdrqVLl8put4c6So/Hse46HOuuw7HuOhzrs8fkXAAAYAzOuAAAAGNQXAAAgDEoLgAA\n",

"wBgUF4M5nU4tWrRIo0aN0pgxY5SVlSVJio+P14UXXqiUlBSlpKRo1apVIU5qvo6OdUfjOHvtHdOj\n",

"R496f59TUlKUkJAgm82mY8eOhTqu0Tr6/X377bc1btw4paSkKDExUS+++GKIk5qvo2O9du1ajR8/\n",

"XklJSUpNTVVNTU2Ik3Z/tlAHwNl74IEHZLFY9MUXX8hisaiurs67bNWqVUpJSQlduB6mo2N9pp8B\n",

"zk57xzQmJkbV1dXedQoLC/Xee+9p4MCBoQvaA7R3rD0ej7KyslRRUaGkpCTV1tbqoosu0ty5cxUV\n",

"FRXqyMZq71gfP35cN910kzZs2KBLLrlE77//vm666SZt37491HG7Nw+M1NTU5ImKivI0NDSctiwu\n",

"Ls6zdevWrg/VQ3V0rM/0M8DZ8feYXnTRRZ4///nPXROqh+roWLe1tXkGDhzoee+99zwej8dTU1Pj\n",

"Offccz1OpzMUMXuEjo715s2bPaNGjfIZi4qK8mzZsqUr4xmHS0WG2rVrlwYOHKj8/HyNHz9eV155\n",

"pcrLy73Lb7nlFo0ZM0a333676uvrQ5jUfB0d6+/7GSBw/hzTDz/8UMePH9dPfvKTEKXsGTo61haL\n",

"RatWrdLcuXMVFxenK664Qi+++KLCw8NDHdlYHR3rUaNG6ejRo/rwww8lSW+++aYaGxtVW1sb2sDd\n",

"XaibE87Oli1bPJI8L774osfj8Xg++eQTT0xMjKeurs6zZ88ej8fj8bS0tHjuu+8+z6xZs0IZ1Xgd\n",

"HetNmzZ1+DPA2TnT7/U//OIXv/Dce++9oYrYY5zpWF911VXeMy5VVVWe2NhYT319fSjjGu1Mx3rd\n",

"unWe9PR0z7hx4zx33323Z/To0Z6//OUvIU7cvVFcDFVfX+/p1auXx+VyecfGjx/veffdd33WO3jw\n",

"oCcyMrKr4/UoHR3r1157za+fAfz3fb/XjY2NnsjISM/nn38eqog9RkfH+oknnjjt8sX48eM9f/3r\n",

"X7s6Yo/h79/Xzc3NnujoaM+XX37Z1RGNwqUiQw0aNEhXX321/u///k+StHv3bu3evVsXX3yxTpw4\n",

"4V1v5cqVGjt2bIhS9gwdHeu0tLQOfwY4O2f6vZa+nXSenJysiy66KJQxe4SOjvW8efN06NAhff75\n",

"55Ikh8OhXbt26cILLwxlXKOd6ff60KFD3vX+8z//U1OnTtXIkSNDFdUMoW5OOHu7du3yTJ482ZOY\n",

"mOhJSkry/OlPf/Ls2rXLk5KS4hkzZownMTHRc91113l2794d6qjGa+9Yn2kcZ+9MxzQtLc3z/PPP\n",

"hzBdz9LRsX7llVe8Y4mJiZ6XX345xEnN19GxXrhwoefCCy/0XHDBBZ6srCzP8ePHQxvUADyrCAAA\n",

"GINLRQAAwBgUFwAAYAyKCwAAMAbFBYBXfHy8z0frS9LkyZP1xhtvnHG7hQsXav369d+7/4cfflj3\n",

"3HNPu8uqq6v16quvnjY+b948ffTRR9+7vT9qa2sVHR191tt/17Zt2zRr1qxO2x+A70dxAfCD/c//\n",

"/I+mTJnyg/bRXnGpqqrSsWPHlJaW9oP2HSxJSUmy2+1at25dqKMAPxoUFwB+aWxs1C9/+UtNnDhR\n",

"SUlJys7OVktLiyTfszKHDh3S9OnTNXr0aE2fPl0///nP9fDDD3v3c+jQIf30pz/V6NGjNXXqVB07\n",

"dkxHjhzRQw89pPXr1yslJUV33HGHJKm4uFjz589vN8+KFSt0zTXX6MYbb9SYMWM0fvx4ffXVV97l\n",

"L7zwglJSUpScnKzx48f7fIz60qVLdemll2rkyJF6++23veObN2/W1KlTNX78eI0dO1avvfaaJKm+\n",

"vl7Tp0/XmDFjlJSUpNtuu827zY033qji4uIfdGwB+I/iAsDHz372M6WkpHhfH3/8sSRp8eLFuvLK\n",

"K1VVVaWamhq1tbVp+fLlp22fm5urtLQ07dixQy+99JIqKip8lldWVmrFihXasWOHhgwZouLiYg0Z\n",

"MkSPPPKIpkyZourqaj377LOSpIqKCk2aNKnDrJs3b1Z+fr4+/fRTXXPNNXr88ce92z3yyCN65513\n",

"VFNTow0bNmjIkCGSpIaGBiUlJWnLli16+umn9e///u+SpBMnTig7O1svv/yyPv74Y7377rtavHix\n",

"Dhw4oJKSEp1//vn69NNPtW3bNv3ud7/zZkhLS+MZVUAXsoU6AIDuZdWqVUpJSfG+nzx5siTpjTfe\n",

"0EcffaSioiJJ0qlTp2S1Wk/bvry8XIWFhZKk2NjY0x6GOHPmTMXExEj69h/9Tz/9tMMs+/fv19Ch\n",

"QztcnpaWpvPPP9/759///veSpDVr1ujmm2/WOeecI0nq06ePd5uIiAjNnTvXu82uXbskffvwxq++\n",

"+uq0OSs7d+5UamqqnnzySS1evFjp6emaOXOmd3lsbKyOHj2q5uZmRUREdJgVQOeguADwi8fj0euv\n",

"v66EhISAtrNYLD7v//kfd6vVKpfL1eG2ffr0UXNzc4fLA9nXP9jtdm8mq9Uqt9st6dvv75JLLvE+\n",

"qfe7qqurVVZWptLSUj344IPaunWrrFarmpubZbVaeXoy0EW4VATAL3PmzNHjjz/uLQfHjx+Xw+E4\n",

"bb2pU6dqxYoVkqTDhw/rrbfe8mv//fr1U0NDg89YUlKSdu7cGXDWn/70pyopKfE+B+bvf/+7/v73\n",

"v59xm8suu0y7d+9WWVmZd6y6ulotLS3avXu3IiMjdcMNN+j3v/+9vvjiCzU1NUmSPv/8cyUmJqpX\n",

"L/46BboC/6UB8MuTTz6p3r17KyUlRUlJSbr66qt9Jrz+w/Lly/X+++9r9OjRuummmzRp0iS/bkG+\n",

"+uqr5XQ6lZSU5J2cm5mZ6X0wXSDS09O1dOlSzZgxQ8nJybrqqqtUX19/xm0GDBigNWvWKD8/X8nJ\n",

"yRo9erQeeOABtbW1qaKiQpdeeqlSUlJ02WWX6YknnlD//v0lSWvXrlVmZmbAGQGcHZ5VBKBTnTp1\n",

"SmFhYbLZbDp69KhSU1NVUlJyxkm2HWlqatJll12mjz76SH379g1C2h+mpaVF48eP17p16zRo0KBQ\n",

"xwF+FCguADrVtm3bdMstt8jj8ailpUXZ2dneO3fORnl5uYYOHarExMROTNk5du7cqV27dmn27Nmh\n",

"jgL8aFBcAACAMZjjAgAAjEFxAQAAxqC4AAAAY1BcAACAMSguAADAGBQXAABgDIoLAAAwBsUFAAAY\n",

"4/8DQ2DjFAA5CY4AAAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-da215588-6571-47a5-b1c0-af9b8fd7a8f5\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-da215588-6571-47a5-b1c0-af9b8fd7a8f5\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x786710629ff0>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">Time series</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"import seaborn as sns\n",

"def \_plot\_series(series, series\_name, series\_index=0):\n",

" palette = list(sns.palettes.mpl\_palette('Dark2'))\n",

" xs = series['Index']\n",

" ys = series['Height(Inches)']\n",

" \n",

" plt.plot(xs, ys, label=series\_name, color=palette[series\_index % len(palette)])\n",

"\n",

"fig, ax = plt.subplots(figsize=(10, 5.2), layout='constrained')\n",

"df\_sorted = \_df\_16.sort\_values('Index', ascending=True)\n",

"\_plot\_series(df\_sorted, '')\n",

"sns.despine(fig=fig, ax=ax)\n",

"plt.xlabel('Index')\n",

"\_ = plt.ylabel('Height(Inches)')"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-c1ef8b9e-949f-4f5b-b1a9-fc738ca53eb5\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAABczUlEQVR4nO3deVyVBd7+8euwu4ECCorivsumaC6ZCprpNOW0WeOeM9Nmak5T\n",

"VvN7mk2dFjWdFrXMtSnba5pyAde0VATcV0DEBXdRkZ3794fCSKmBcrjPfc7n/XrxeuRwOHyZ+4HT\n",

"xXXu+2szDMMQAAAAAACwDDezBwAAAAAAABVDmAcAAAAAwGII8wAAAAAAWAxhHgAAAAAAiyHMAwAA\n",

"AABgMYR5AAAAAAAshjAPAAAAAIDFEOYBAAAAALAYS4b5GTNmmD0CAAAAAACmsWSYT09PN3sEAAAA\n",

"AABMY8kwDwAAAACAKyPMAwAAAABgMYR5AAAAAAAshjAPAAAAAIDFEOYBAAAAALAYwjwAAAAAABZD\n",

"mAcAAAAAwGII8wAAAAAAWAxhHgAAAAAAiyHMAwAAAABgMYR5AAAAAAAshjAPAAAAAIDFEOYBAAAA\n",

"ALAYwjwAAAAAABZDmAcAAAAAwGII8wAAAAAAWAxhHgAAAAAAiyHMAwAAAABgMYR5Ozubd0mnci6a\n",

"PQYAAAAAwIkQ5u3o0wOJ6vbJK3otcbnZowAAAAAAnAhh3o5Ca/nrYkGeluxP0OGLZ80eBwAAAADg\n",

"JAjzdtQlqIl6NmihQqNY/9q6yuxxAAAAAABOgjBvZ89E9pUkLdmfoIwLZ0yeBgAAAADgDAjzdlam\n",

"nd+22uxxAAAAAABOgDBfBUra+Y9p5wEAAAAAlYAwXwVo5wEAAAAAlYkwX0Vo5wEAAAAAlYUwX0Vo\n",

"5wEAAAAAlYUwX4Um0M4DAAAAACoBYb4KdQ5qojsatKSdBwAAAADcEsJ8FXsmMlYS7TwAAAAA4OYR\n",

"5qvY1e38zG2rzB4HAAAAAGBBhHkTlLTzn+zfokO08wAAAACACiLMm6DsufO08wAAAACAiiHMm4R2\n",

"HgAAAABwswjzJqGdBwAAAADcLMK8iUr2ztPOAwAAAAAqgjBvouigxupFOw8AAAAAqCDCvMmeoZ0H\n",

"AAAAAFQQYd5ktPMAAAAAgIoizDsA2nkAAAAAQEUQ5h3A1e38zK0rzR4HAAAAAODgCPMOoqSd//RA\n",

"otIvnDZ5GgAAAACAIyPMO4gy585v5dx5AAAAAMD1EeYdCO08AAAAAKA8CPMOhHYeAAAAAFAehHkH\n",

"MyGKdh4AAAAAcGOEeQfTqV5j9QppRTsPAAAAALguwrwDmhAZK0n6hHYeAAAAAHANhHkHVNLOFxnF\n",

"mkk7DwAAAAD4CcK8gypp5zl3HgAAAADwU4R5B0U7DwAAAAC4HsK8A6OdBwAAAABcC2HegdHOAwAA\n",

"AACuhTDv4CZEsnceAAAAAFAWYd7BdaoXqt608wAAAACAqxDmLeAZ2nkAAAAAwFUI8xZQtp1fafY4\n",

"AAAAAACTEeYt4n/tfJIOnqedBwAAAABXRpi3iKvb+X9to50HAAAAAFdGmLcQ2nkAAAAAgGTnMJ+X\n",

"l6cxY8aoZcuWCgsL09ChQyVJS5cuVXR0tMLDw9W1a1dt3brVnmM4Ddp5AAAAAIAkedjzwSdOnCib\n",

"zaZ9+/bJZrMpMzNTZ8+e1ZAhQ7R27Vq1b99e69at05AhQ7Rjxw57juI0JkT11eoj+/TpgSQ9HR6j\n",

"Jr4BZo8EAAAAAKhidmvms7OzNXfuXE2aNEk2m02SFBwcrJSUFAUEBKh9+/aSpJ49e+rQoUNKTEy8\n",

"5uPk5eXp/PnzZd6KiorsNbbD61g3VH1CWtPOAwAAAIALs1uYT0lJkb+/vyZPnqzo6Gj17NlT8fHx\n",

"atmypU6fPq0NGzZIkr7++mtduHBBBw8evObjTJkyRX5+fmXeNm3aZK+xLeGZqFhJnDsPAAAAAK7K\n",

"bmG+sLBQ6enpateunRISEjRz5kwNHjxYubm5+vTTT/XCCy+oU6dOWr58udq1aycPj2u/4v+FF15Q\n",

"VlZWmbcuXbrYa2xLuLqdZ+88AAAAALgeu50zHxoaKjc3Nw0ZMkSSFBUVpaZNm2r79u3q27ev+vTp\n",

"I+nyy+iDg4PVrl27az6Ot7e3vL29y9zm7u5ur7Et45moWK06slefpSTp6Yg+auobaPZIAAAAAIAq\n",

"YrdmPjAwULGxsVq2bJkkKS0tTWlpaWrbtq2OHTtWer+///3viomJUYsWLew1ilMqc+781lVmjwMA\n",

"AAAAqEJ2XU03a9YsvfbaawoLC9OgQYM0e/ZshYSE6P/+7//Upk0btWjRQunp6Zo7d649x3BaJefO\n",

"f5aSpLTzp0yeBgAAAABQVey6mq5Zs2ZaternrfG7775rzy/rMkra+VVH9upfW1dpWs8HzR4JAAAA\n",

"AFAF7NrMw/4mRPWVRDsPAAAAAK6EMG9xUXUbKaYh584DAAAAgCshzDuBZyJp5wEAAADAlRDmnQDt\n",

"PAAAAABc29m8S/pk/xazx6h0hHknQTsPAAAAAP+TU1igt7ev0e2fvqpnvv9EiScPmT1SpSLMO4mr\n",

"2/mZW1eaPQ4AAAAAmKKouFgf70/QHZ+9rskJ3ykrP1dt6gTLMAyzR6tUdl1Nh6r1TGRfrTy8V5+n\n",

"JGtsRIya+gaaPRIAAAAAVAnDMLTqyD5NTvhOe85mSpIa1PDTn6Lu1H3No+Tu5lxdNmHeiZS08ysP\n",

"79XMrSs1vedDZo8EAAAAAHa39dRhTdr8rTZkpkqS/Lx8NCa8j0a27a5qHp4mT2cfhHknQzsPAAAA\n",

"wFUcPH9aryYu09dp2yRJXm7uGtW2u8ZE9FEd7+omT2dfhHknQzsPAAAAwNmdzr2oGckrtWjvRhUU\n",

"F8kmm+5rHqk/dbxTDWvWMXu8KkGYd0ITaOcBAAAAOKGcwny9u/N7vb19jS4W5EmSejVoqRejB6h9\n",

"QAOTp6tahHknFFm3kWIbtlH84T208wAAAAAsr7C4SB8f2KKpiSt0POeCJKmDfwO91HmAejZoafJ0\n",

"5iDMO6lnImMVf3gP7TwAAAAAyzIMQysydmtKwlLtzzohSWpUs46e69hf9zYLl5vNua5QXxGEeSd1\n",

"dTs/I3ml3riDdh4AAACAdWw5cUiTEr7VpuMHJUm1vatrXEQfDW/TTd7uRFn+F3Bipe18apLGRsSo\n",

"mR/tPAAAAADHlpp1Uv/cskzfpu+QJHm7e+h37W7Xk2G95OddzeTpHAdh3on99Nx52nkAAAAAjupk\n",

"zgVNT47XB3s3qcgolk02PdSyo/4Ydaca1PAzezyHQ5h3crTzAAAAABxZdkGeZu9Yp1k71upSYb4k\n",

"KbZhG70QfZfa1Ak2eTrHRZh3crTzAAAAABxRQXGRPty3WdOT43Qy56IkKSKwoV6KHqDu9ZubPJ3j\n",

"I8y7gAlRfWnnAQAAADgEwzD0XfpO/XPLUqWePyVJalwrQBM79dfdTcJks9lMntAaCPMuICKwofo2\n",

"aqO4DNp5AAAAAObZdPygJm3+VltOHpIk+XvX0PjIGA1tfZu8uEJ9hfC/lot4JrKv4jJo5wEAAABU\n",

"vf3nTuifW5Zq2aFdkqRqHp76Q/ueerzDHarl5WPydNZEmHcRV7fzM7bGa8Ydg80eCQAAAICTy7x0\n",

"XtOS4vTR/s0qNgy52Wx6pGVnTYjqq6DqvmaPZ2mEeRdS0s5/kZqscRExauZX1+yRAAAAADihC/m5\n",

"emf7Gs3Z+b1yiwokSf1D22lip7vUsnY9k6dzDoR5F1K2nV9JOw8AAACgUuUXFWrx3o16I3mlzuRl\n",

"S5I61Q3VS50HqktQE3OHczKEeRdDOw8AAACgshmGof+kbdMricuVfuG0JKmZb6BeiL5Ld4W25wr1\n",

"dkCYdzG08wAAAAAq04ZjKZqU8J22njosSapbraYmRPbVw606y9PN3eTpnBdh3gXRzgMAAAC4VbvP\n",

"ZGrKlu+08vBeSVJ1Dy893uEOPdahp2p4eps8nfMjzLugiMCG6teorVZk7KadBwAAAFAhRy+e0+tJ\n",

"K/TJgUQZMuRhc9OQ1l00PjJWdavVMns8l0GYd1HPRMZqRcZu2nkAAAAA5ZKVl6O3tq/W3F3rlVdU\n",

"KEka2LiDJnbqT54wAWHeRYXTzgMAAAAoh7yiQi3c84NmbF2lc3mXJEm3BTXRi9ED1aleqMnTuS7C\n",

"vAu7up0fGxGj5vw1DQAAAMAVxUaxvkzdqtcSlyvj4llJUku/enox+i71bdSWK9SbjDDvwn7azs+k\n",

"nQcAAAAgad3R/Zq0+TvtOHNUkhRU3Vd/jOqrh1p0kgdXqHcIhHkXV9LOf3nl3HnaeQAAAMB17Tx9\n",

"VJMTvtOao/slSTU9vfVUWG/9rn0PVfPwMnk6XI0w7+Jo5wEAAAAcvnhWryYu1xcpyTJkyNPNXcNa\n",

"36ZxkTEK8Klp9ni4BsI8aOcBAAAAF3U275Le3LpK83ZvUH5xkSTp3qYR+lPHO9XEN8Dk6XAjhHko\n",

"PLCh7mzUVstp5wEAAACXkFNYoHm7N+itbauUlZ8rSeoe3EwvdR6oiMCGJk+H8iDMQ5L0TGRfLaed\n",

"BwAAAJxaUXGxPktJ1OtJK3Q0O0uS1KZOsF6MHqA+Ia24Qr2FEOYhSQoLDKGdBwAAAJyUYRhadWSf\n",

"Jid8pz1nMyVJ9av76U8d++n+5h3l7uZm8oSoKMI8StHOAwAAAM5n66nDmrT5W23ITJUk+Xr5aEx4\n",

"H41q213VPDxNng43izCPUle3828kx+tfvR42eyQAAAAANyn9wmm9umW5vkrbKknycnPXqLbdNSai\n",

"j+p4Vzd5OtwqwjzKKGnnv0rbqnERMWpRu57ZIwEAAACogDO52XojOV6L9m5UQXGRbLLpN80j9aeo\n",

"fmpUy9/s8VBJCPMo46fnztPOAwAAANaQU5iv93au19vbV+tCQZ4kqVeDlnoxeoDaBzQwdzhUOsI8\n",

"foZ2HgAAALCOwuIifXxgi6Ymxen4pfOSpPb+9fVS9EDdEdLS5OlgL4R5/AztPAAAAOD4DMNQXMZu\n",

"TdmyVPvOnZAkNaxZW8917K9BzSLkZuMK9c6MMI9rmhBFOw8AAAA4qsSThzRp87faePygJKm2d3WN\n",

"De+jEW27ydudmOcKOMq4pg4BIeof2k7LDu2inQcAAAAcRGrWSf1zyzJ9m75DkuTt7qHR7XroqbDe\n",

"8vOuZvJ0qEqEeVzXM5GxWnZoF+08AAAAYLKTORf0RnK8Pti7SYVGsWyy6cEWHfVsVD81qFnb7PFg\n",

"AsI8ruvqdv6NrSv1Ju08AAAAUKWyC/I0Z+c6zdq+VtmF+ZKkmIat9UKnAWrrH2zydDATYR43VNrO\n",

"p27VeNp5AAAAoEoUFBfpo32bNS05TidzLkqSIgIb6qXoAepev7nJ08EREOZxQ7TzAAAAQNUxDENL\n",

"D+3UlISlSj1/SpLUuJa/nu/YX3c3DeMK9ShFmMcvop0HAAAA7G/z8YOalPCdEk6kS5L8vWtofGSM\n",

"hra+TV5coR4/wf9H4BfRzgMAAAD2s//cCf1zy1ItO7RLkuTj7qk/tL9dT4T1Ui0vH5Ong6MizKNc\n",

"aOcBAACAynX80nlNS4rTh/s3q9gw5Gaz6eGWnTUhqq+Cq/uaPR4cHGEe5UI7DwAAAFSOC/m5mrVj\n",

"rebsXKecwgJJ0p2N2mpi9F1qVTvI5OlgFYR5lBvtPAAAAHDz8osKtXjvRs3YulKnc7MlSR3rhurP\n",

"nQeqS1ATc4eD5RDmUW608wAAAEDFGYahbw5u1z+3LFP6hdOSpKa+gZrYqb8GNu4gm81m8oSwIsI8\n",

"KuTqdn5cRIxa0s4DAAAA17XhWIomJXynracOS5LqVqupZyL76pFWneXp5m7ydLAywjwqpGw7H6+3\n",

"ej1i9kgAAACAw9lzNlNTEpYq/vAeSVJ1Dy893uEOPdahp2p4eps8HZwBYR4VVtLOf526TeMjYmnn\n",

"AQAAgCuOZmdpatJyfXIgUcWGIXebm4a07qLxEbGqV72W2ePBiRDmUWG08wAAAEBZWXk5env7Gr23\n",

"63vlFRVKkgY27qCJnfqrmV9dk6eDMyLM46ZMiOxLOw8AAACXl1dUqIV7ftCMrat0Lu+SJKlLUBO9\n",

"FD1Aneo1Nnk6ODPCPG5K+4AGuiu0vZYe2kk7DwAAAJdTbBTrq9RtejVxmTIunpUktfSrpxei71K/\n",

"Rm25Qj3sjjCPm/ZMZKyWHtpJOw8AAACXsu7ofk1OWKrtp49IkoKq1dIfO/bTQy06yYMr1KOKEOZx\n",

"02jnAQAA4Ep2nj6qyQnfac3R/ZKkmp7eejKsl37X7nZV9/QyeTq4GsI8bsnV7fy4iBi1qh1k9kgA\n",

"AABApTp88axeS1yuz1OSZciQp5u7hrW+TeMiYxTgU9Ps8eCiCPO4JVe38zOSV+qt3rTzAAAAcA5n\n",

"8y7pza2rNH/PD6VXqL+nabie69hfTXwDTJ4Oro4wj1tW2s6nbdO4SNp5AAAAWFtuYYHm7d6gN7et\n",

"UlZ+riSpe3AzvRg9QJF1G5k8HXAZYR63jHYeAAAAzqCouFhfpCbp1cTlOpqdJUlqXTtIL3UeqD4h\n",

"rbhCPRwKYR6VgnYeAAAAVmUYhlYf2afJCd9p99lMSVL96n76U8d+ur95R7m7uZk8IfBzhHlUCtp5\n",

"AAAAWNG2U4c1KeE7rT+WIkny9fLRmPA+GtW2u6p5eJo8HXB9hHlUmglRtPMAAACwhkMXzuiVxGX6\n",

"KnWrJMnLzV0j23bT0+F9VMenhsnTAb+MMI9K086/gQY0bq/v0mnnAQAA4JjO5GZrxtaVWrjnRxUU\n",

"F0mSftMsUs91vFONavmbPB1QfoR5VKpnImP1XTrtPAAAABxLTmG+3tu5Xm9vX60LBXmSpDsatNSL\n",

"0XepQ0CIucMBN4Ewj0p1dTv/RnK83u79W7NHAgAAgAsrKi7Wxwe26PWkFTp+6bwkqb1/fb0UPVB3\n",

"hLQ0eTrg5hHmUelK2vn/pG3XuIjjal2Hdh4AAABVyzAMxR/eo8kJ32nfuROSpIY1a+tPHfvrN80i\n",

"5GbjCvWwNsI8Kl2Zc+e30s4DAACgaiWePKRJm7/TxuNpkiQ/r2oaFxGj4W26yocr1MNJEOZhF7Tz\n",

"AAAAqGqpWaf0SuIy/ffgdkmSt7uHRrfroafCesvPu5rJ0wGVizAPu6CdBwAAQFU5lXNR05Pj9cHe\n",

"jSo0imWTTQ+26Khno/qpQc3aZo8H2IVdTxTJy8vTmDFj1LJlS4WFhWno0KGSpG+//VYdO3ZUZGSk\n",

"OnTooAULFthzDJjkmci+kqT/pG3X3rPHTZ4GAAAAzia7IE/Tk+PU49NXtWDPDyo0ihXTsLWW3ztO\n",

"03o+SJCHU7NrMz9x4kTZbDbt27dPNptNmZmZMgxDQ4cO1erVqxUeHq6DBw+qTZs2uu+++1SrVi17\n",

"joMq1s6/vgY27qBv03fQzgMAAKDSFBYX6aN9CZqavEIncy5KkiICG+rF6AHqUb+5ydMBVcNuYT47\n",

"O1tz587V4cOHZbPZJEnBwcEyDEM2m03nzp2TJJ0/f14BAQHy9va21ygw0fjIWH2bvoNz5wEAAHDL\n",

"DMPQ0kM79c8ty5SSdVKS1LiWv57v2F93Nw3jCvVwKXYL8ykpKfL399fkyZMVFxenatWq6S9/+Yti\n",

"Y2O1ZMkS3XfffapRo4bOnj2rzz//XF5eXtd8nLy8POXl5ZW5raioyF5jo5LRzgMAAKAybD5+UJMS\n",

"vlPCiXRJkr93DY2LjNGw1rfJy51LgcH12O1PV4WFhUpPT1e7du2UkJCgmTNnavDgwTp+/Lj+8Y9/\n",

"6PPPP1d6erri4+M1bNgwnTp16pqPM2XKFPn5+ZV527Rpk73Ghh2Mj4yVxLnzAAAAqLgD505odPxC\n",

"/ebbWUo4kS4fd0+NDe+j9Q/8SaPb9SDIw2XZLcyHhobKzc1NQ4YMkSRFRUWpadOmWrRokY4ePao7\n",

"7rhDktS5c2c1bNhQSUlJ13ycF154QVlZWWXeunTpYq+xYQcl7bwhQ28kx5s9DgAAACzg+KXzen79\n",

"54r98g0tO7RLbjabHmnVWevuf1bPdeqvWl4+Zo8ImMpuYT4wMFCxsbFatmyZJCktLU1paWl68MEH\n",

"dezYMe3evVuSdODAAaWkpKh169bXfBxvb2/5+vqWeXN3d7fX2LCTknb+m4PbtedspsnTAAAAwFFd\n",

"LMjTa4nLdftnr+mDfZtUZBTrzkZtFTdovF7rcb/q1/Aze0TAIdj1NSmzZs3S6NGj9fzzz8vNzU2z\n",

"Z89W48aNNWfOHD300ENyc3NTcXGx3nzzTYWGhtpzFJiszLnzySv1Th/OnQcAAMD/5BcV6oO9m/TG\n",

"1nidzs2WJEXVbaQ/Rw/UbcFNTZ4OcDw2wzAMs4eoqAkTJmjatGlmj4EK2nXmmO78aoZssmnFoHFq\n",

"UyfY7JEAAABgMsMw9N+D2/XPLct08MJpSVJT30BN7NRfAxt3KN2MBaAsrhaBKtPOv75+1SRM/z24\n",

"nXYeAAAA+iEzVZM2f6fkUxmSpECfmpoQ1VePtOosTzdOrQVuhDCPKjU+Ilb/Pbhd3xzcrnFnM2nn\n",

"AQAAXNDes8c1Zct3isvYI0mq7uGlxzr01GMd7lBNT2+TpwOsgTCPKtXWP5h2HgAAwEUdzc7S1KQV\n",

"+uTAFhUbhtxtbhrSuovGR8SqXvVaZo8HWAphHlWOdh4AAMC1nM/P1VvbVuu9Xd8rr6hQkjSgcXtN\n",

"7HSXmvvVNXk6wJoI86hyV7fzbyTHa1afIWaPBAAAADvIKyrUoj0/asbWlTqbd0mS1CWoiV6KHqBO\n",

"9RqbPB1gbYR5mOLqdn4P7TwAAIBTKTaK9VXqNr2WuFyHLp6RJLXwq6sXOt2lO0PbcYV6oBIQ5mEK\n",

"2nkAAADn9P3RA5qU8J22nz4iSQqqVksTovppcMtO8uAK9UClIczDNLTzAAAAzmPXmaOalLBUa47s\n",

"kyTV9PTWk2G99Lt2t6u6p5fJ0wHOhzAP07T1D9bdTcL0De08AACAZR25eE6vJS7XZylJMmTIw+am\n",

"YW26anxkjAJ8apo9HuC0CPMw1fjIWH1DOw8AAGA55/Iu6V/bVmv+7g2lV6i/p2m4nuvYX018A0ye\n",

"DnB+hHmYqk0d2nkAAAAryS0s0PzdP+hf21YqKz9XktQtuJleih6gyLqNTJ4OcB2EeZiOdh4AAMDx\n",

"FRUX64vUJL2WuEJHss9JklrXDtKL0QMU07A1V6gHqhhhHqa7up2fnhyv2bTzAAAADsMwDK0+sk+T\n",

"E77T7rOZkqT61f30bMd+eqB5R7m7uZk8IeCaCPNwCCXt/H8PbtfuM5lq6087DwAAYLbtp45oUsJ3\n",

"+v7YAUmSr5ePngrrrUfb9VA1D0+TpwNcG2EeDqHMufNbaecBAADMdOjCGb2SuExfpW6VJHm5uWtE\n",

"224aG95HdXxqmDwdAIkwDwdCOw8AAGCuM7nZmrl1pRbs+VEFxUWSpN80i9RzHe9Uo1r+Jk8H4GqE\n",

"eTgM2nkAAABz5BTma+6u9Xpr22pdKMiTJPVs0EIvdhqgsMAQk6cDcC2EeTiU8ZGx+u/BHbTzAAAA\n",

"VaCouFifHNii15NWKPPSeUlSO//6eil6gHqFtDJ5OgA3QpiHQylp5/9zcBvtPAAAgJ0YhqH4w3s0\n",

"JWGp9p47LklqWLO2/tSxv37TLEJuNq5QDzg6wjwczrjIGM6dBwAAsJOkkxn6x+ZvtfF4miTJz6ua\n",

"xkb00Yg23eTDFeoByyDMw+Fc3c5PT47TnJihZo8EAABgeWnnT+mVLcv0zcHtkiRvdw892raHngrv\n",

"pdre1U2eDkBFEebhkEra+W/Td2jXmWNq51/f7JEAAAAs6VTORU1PjtcHezeq0CiWTTY90CJKz0bd\n",

"qZCatc0eD8BNIszDIZU5dz45nnYeAACggi4V5GvOznV6Z/saZRfmS5L6hLTWC9F3UZQAToAwD4dF\n",

"Ow8AAFBxhcVF+mhfgqYlx+lEzgVJUnhAiF6KHqAeDVqYPB2AykKYh8OinQcAACg/wzC07NAu/XPL\n",

"Uh3IOilJCq3pr+c79devm4ZxhXrAyRDm4dDGR8bSzgMAAPyChOPp+kfCt0o4kS5JquNdXeMjYzWs\n",

"9W3ycuc/+QFnxE82HFrrOkH6ddMwfZ1GOw8AAPBTKVknNSVhqZYe2ilJ8nH31O/b364nwnrJ18vH\n",

"5OkA2BNhHg5vXESs/pNGOw8AAFDi+KXzmp4crw/3bVaRUSw3m02DW0ZrQmRf1a/hZ/Z4AKoAYR4O\n",

"j3YeAADgsosFeZq1Y61m71irnMICSVK/Rm31QvRdalU7yOTpAFQlwjwsoWw7f1Tt/BuYPRIAAECV\n",

"KSgu0gd7N+mN5Hidyr0oSYqq20gvRQ9Q1+BmJk8HwAyEeVjC1e389OR4vRszzOyRAAAA7M4wDP33\n",

"4Hb9c8syHbxwWpLU1DdQz3fqr1817iCbzWbyhADMQpiHZZS089+l76SdBwAATu/HzFRNSvhOSScz\n",

"JEmBPjX1TGSsftu6izzd3E2eDoDZCPOwDNp5AADgCvaePa4pW75TXMYeSVJ1Dy/9oUNPPd7hDtX0\n",

"9DZ5OgCOgjAPSxkfSTsPAACc07HsLE1NWqGPD2xRsWHI3eam37bqrGci+6pe9VpmjwfAwRDmYSmt\n",

"agfpnqbh+iptK+08AABwCufzc/X29tV6b+d65RZdvkL9gMbtNbHTXWruV9fc4QA4LMI8LGdcZIy+\n",

"TttGOw8AACxv37njGrz0XZ3MuXyF+s71Guul6IGKDmps8mQAHJ2b2QMAFVXSzkvS9OR4k6cBAAC4\n",

"Occvndew5fN0MueimvoGam7MMH0+8HGCPIByIczDksZFxsgmW2k7DwAAYCXZBXkasWK+jmSfU1Pf\n",

"QH31qyfUv3F7Vs0BKDfCPCzp6nZ+WhLtPAAAsI7C4iI9vurf2nHmqAJ8amhRv1Hy96lh9lgALIYw\n",

"D8sqaeeXHtqpnadp5wEAgOMzDEMv/vCVVh3ZKx93T83rO0JNfAPMHguABRHmYVmcOw8AAKzmzW2r\n",

"9e99m2STTW/1elgd64aaPRIAiyLMw9Jo5wEAgFV8lpKkVxKXSZL+dtuv1b9xe5MnAmBlhHlYWqva\n",

"QbqnGe08AABwbOuPpejZ7z+VJD3WvqdGtetu8kQArO6mw3x+fn5lzgHctPERsbTzAADAYe05m6nf\n",

"r1ykguIi3d0kTC91HmD2SACcQIXC/OrVq/Xwww+rbt268vHxkZeXlzp27KjJkyfrzJkz9poRuKGW\n",

"tevRzgMAAIeUeem8hq+Yp/P5uepcr7He6PmQ3Gy8OBbArSv3b5KBAwdq5syZuu+++5SYmKi8vDyd\n",

"Pn1as2bNUmFhoWJiYrR06VJ7zgpcF+08AABwNBcL8jRixTwdzc5SM99AvR87XD4enmaPBcBJ2AzD\n",

"MMpzx+3btyssLOy6Hy8oKFBaWppatWpVacNdz4QJEzRt2jS7fx1Yy1NrPtRXqVvVP7Sd5sYON3sc\n",

"AADgwgqKizQyboHWHNmnAJ8a+vruJ9W4FivoAFSecjfz1wryhmHowoULkiRPT88qCfLA9ZS088sO\n",

"7dKO00fMHgcAALioy7vkv9SaI/vk4+6p+X1HEuQBVLoKn7AzevRonTt3Tvn5+YqMjFRQUJDefvtt\n",

"e8wGVAjnzgMAAEcwc+tKfbhvs9xsNr3d+xFF1W1k9kgAnFCFw/yWLVtUu3ZtLV26VFFRUcrMzNSs\n",

"WbPsMRtQYbTzAADATJ8e2KLXklZIkv522z26M7SdyRMBcFYVDvMlp9ivW7dOd999t3x9feXu7l7p\n",

"gwE3g3YeAACY5fujB/Ts959Jkh7vcIdGtu1m8kQAnFmFw3xwcLCeeOIJffLJJ+rbt68KCgpUVFRk\n",

"j9mAm/IM7TwAAKhiJbvkC41i/bpJuF6MvsvskQA4uQqH+Q8++ECtW7fWRx99pNq1a+vIkSOaMGGC\n",

"PWYDbkqL2vV0b7MISbTzAADA/o5lZ2nY8nm6UJCn24KaaHrPB9klD8DuKvxbJjAwUIMHD1Zubq4k\n",

"KSQkRL/97W8rfTDgVoyPiKGdBwAAdnchP1cj4ubr2KUsNferq/fYJQ+gilQ4zH/66afq2rWrRo4c\n",

"KUnatWuXBg0aVMljAbeGdh4AANhbQXGRHl/1gXadOaZAn5pa1G+U6nhXN3ssAC6iwmF+ypQpSkxM\n",

"VJ06dSRJERERSk9Pr/TBgFtFOw8AAOzFMAxN3PCF1hzdr2oenlrQb6RCa/mbPRYAF1LhMO/u7q6A\n",

"gIAyt3l5eVXaQEBloZ0HAAD2MmPrSi3ZnyA3m03v9P6tIgIbmj0SABdT4TBfq1YtHT9+XDabTZIU\n",

"Hx8vf3/+CgnHRDsPAAAq2yf7t+j1K7vkJ3W9V30btTV5IgCuqMJh/pVXXtGAAQOUmpqq22+/XcOH\n",

"D9fUqVPtMRtwy2jnAQBAZVp3dL/+tP7yLvknw3ppWJuuJk8EwFV5VPQToqOjtWrVKm3YsEGGYah7\n",

"9+6qXbu2HUYDKsf4iBh9nba1tJ3vEBBi9kgAAMCCdp05pt+vXKxCo1j3No3QxE79zR4JgAu7qQWY\n",

"fn5+GjBggAYOHEiQh8NrUbue7m1KOw8AAG7e0ewsDV8xTxcL8nRbUFNNY5c8AJNV+DfQ0qVL1aZN\n",

"G3l5ecnd3V1ubm5yd3e3x2xApRkXESM3G+fOAwCAiruQn6sRK+Yp89J5tfSrp7mxw+TtXuEXuAJA\n",

"papwmB87dqxmzJihU6dO6fz587pw4YLOnz9vj9mASkM7DwAAbkZBcZEeW/WBdp/NVN1qNbWw30jV\n",

"Zpc8AAdQ4TDv6+ur/v37y9fXVzVq1Ch9Axzd1e389lO08wAA4MYMw9Dz6z/X2pJd8n1HqhG75AE4\n",

"iAqH+bvvvltffvmlHUYB7KtsOx9n8jQAAMDRTU+O18cHtsjNZtOs3kMUzi55AA6k3Cf71KlTRzab\n",

"TYZhKCsrS9WqVZO3t7cMw5DNZtOZM2fsOSdQKcZFxOirtK1anrFb208dUVggV7YHAAA/9/H+BE27\n",

"8sf/yV0HKbZRG5MnAoCyyh3mk5OT7TgGUDVK2vkvUpM1PTlO7/cdYfZIAADAwaw5sk/Prf9ckjQm\n",

"vLeGtrnN5IkA4OfK/TL7xo0bq3HjxrLZbAoKCip9PygoSG5urOWAdYyPjJWbzVbazgMAAJTYdeao\n",

"Hlv1gQqNYg1qFqnnOt5p9kgAcE0VTuEPPPBAmfcNw/jZbYAja+5XV4OaRUri3HkAAPA/l3fJz9fF\n",

"gjx1DW6qqbc/wC55AA6rwr+d8vPz5ePjU/p+tWrVlJeXV6lDAfZWcmV72nkAACBJ5/NzNfzKLvlW\n",

"tevpvRh2yQNwbBUO8zabTSdOnCh9PzMzU4ZhVOpQgL3RzgMAgBL5RYV6bNVi7TmbqXrVamlhv1Hs\n",

"kgfg8Cr858axY8eqW7duGjZsmCRp8eLFevnllyt9MMDexkXE6MvUZK5sDwCACzMMQ8+t/1zrjh5Q\n",

"dQ8vLeg7Ug1r1jF7LAD4RRVu5keNGqW5c+fq0qVLunTpkubNm1ca7AErubqdn0Y7DwCAS5qaHKdP\n",

"UxLlbnPTrD5D+OM+AMu4qROBevfurd69e1fyKEDVK2nnV2Ts1rZThxUe2NDskQAAQBX5aN9mvZEc\n",

"L0ma1O1exTRsbfJEAFB+FQ7zBw8e1CuvvKKUlBQVFhaW3r5y5cpKHQyoCiXt/OcpSZqeHK957J0H\n",

"AMAlrD6yT89v+EKS9HR4Hw1tzS55ANZS4TD/0EMPKTY2VmPGjJG7u7s9ZgKq1HjaeQAAXMrO00f1\n",

"2MrFKjKKdV/zKHbJA7CkCof53NxcTZkyxR6zAKZo5ldXv2kWqc9o5wEAcHpHLp7T8BXzlF2Yr+7B\n",

"zfR6j/tls9nMHgsAKqzCF8Dr0KGDDh06ZI9ZANOU7J0vaecBAIDzycrL0fAV83Q854Ja1a6nd2OG\n",

"yYtd8gAsqsK/vU6ePKmIiAh169ZNPj4+pbd//vnnlToYUJVo5wEAcG75RYX6w6rF2nvuuIKq1dKi\n",

"fo/Kz7ua2WMBwE2rcJgfOnSohg4dWq775uXl6Y9//KOWLVsmHx8fRUREaMaMGYqNjS29z6VLl5Sa\n",

"mqoTJ07I39+/ouMAlWZcRIy+4Nx5AACcjmEY+tP6z7T+WIpqeHhpQb+RCqlZ2+yxAOCWVDjMjxhR\n",

"/sZy4sSJstls2rdvn2w2mzIzMxUQEKDk5OTS+7z++utas2YNQR6mo50HAMA5vZ60Qp+lJJXuku8Q\n",

"wC55ANZX7jA/YcKEG3582rRpZd7Pzs7W3Llzdfjw4dKLigQHB//s8+bOnXvDC+rl5eUpLy+vzG1F\n",

"RUXlHRuokKvb+a2nDiuCdh4AAEv7975NmrH18grlKd0HqQ+75AE4iXJfAM/Pz++Gbz+VkpIif39/\n",

"TZ48WdHR0erZs6fi4+PL3GfDhg06e/as7r777ut+3SlTpvzsa23atKkC3yJQfiXtvCRNT44zdxgA\n",

"AHBLVh3eqxc2fCnp8h/sf9uqi7kDAUAlshmGYdjjgRMTE9WpUyctWLBAw4cPV1JSkvr166edO3cq\n",

"KChIkjR69GgFBATo1Vdfve7jXKuZ/3//7/9pxowZ9hgbUGrWSfX+YpqKDUP//fUY2nkAACxox+kj\n",

"uv/b2couzNf9zaP0Rs+HWEEHwKmUu5nfuHHjDT+ek5OjXbt2lb4fGhoqNzc3DRkyRJIUFRWlpk2b\n",

"avv27ZKkixcv6uOPP9ajjz56w8f19vaWr69vmTd3d/fyjg1UGO08AADWduTiOY1YMV/ZhfnqUb+5\n",

"XmOXPAAnVO4wP3XqVPXr10/z5s3Trl27dPr0aR05ckQrV67Uc889p27duun48eOl9w8MDFRsbKyW\n",

"LVsmSUpLS1NaWpratm0rSVqyZIkiIiLUpk2bSv6WgFs3LiJWbjab4jL2aCt75wEAsIysvBwNW/G+\n",

"judcUOvaQeySB+C0yh3mP/74Y02ePFnr16/XPffco5CQEIWHh+vvf/+7QkNDtX79evXp06fM58ya\n",

"NUuvvfaawsLCNGjQIM2ePVshIZevHjp37lyNHj26cr8boJI08wvUfc2iJNHOAwBgFXlFhfrdykXa\n",

"d+6Egqr7alG/UfL18jF7LACwC7udM29PEyZM+NnV84HKlpp1Sr2/mMq58wAAWIBhGBq7dom+SE1W\n",

"DQ8vfT7wcbUPaGD2WABgN+Vu5ks8+eST5boNsDraeQAArOO1xOX6IjVZ7jY3zYkZSpAH4PQqHOZ/\n",

"/PHHn922YcOGShkGcDRjI2JKz51PPplh9jgAAOAaFu/dqJnbVkmSXun+G/UKaWXyRABgf+W+GsiS\n",

"JUv00UcfKS0tTffdd1/p7VlZWapZs6ZdhgPMVtLOf5qSqOnJ8VrQb6TZIwEAgKvEZ+zRSz98JUka\n",

"Hxmrh1t1NnkiAKga5Q7zbdq00b333qvExETde++9pbf7+voqNjbWLsMBjmBsRIw+T01S/OHL7Xxk\n",

"3UZmjwQAACRtP3VET6z+t4qMYj3QvKP+GNnX7JEAoMqUO8xHREQoIiJCv/rVr1S3bl17zgQ4FNp5\n",

"AAAcz+GLZzUibr4uFearZ4MWerXHfeySB+BSKrx009PTU6+88opSUlJUWFhYevv7779fqYMBjmRs\n",

"RIy+SE2mnQcAwAGcy7ukYcvn6UTOBbWpE6zZfYaySx6Ay6nwb70HHnhAdevWVbdu3eTu7m6PmQCH\n",

"08wvUPc1j9QnB2jnAQAwU8ku+f1ZJxRc3VcL2SUPwEVVOMwfO3ZMcXGs6YLrGRsRo89TaOcBADBL\n",

"sVGsCd9/oh8z01TT01sL+41Ugxp+Zo8FAKao8Gq65s2b69y5c3YYBXBsTX0vt/OSND053txhAABw\n",

"Qa8mLtdXqVvlYXPTnD5D1c6fXfIAXFe5m/kJEyZIkqpXr66OHTvqrrvuko/P/17SNG3atMqfDnAw\n",

"tPMAAJhj8Z6NenPbaknSqz3u0x0hLc0dCABMVu4w7+fnV/p/27Zta7eBAEdW0s5/ciBR05LjtLDf\n",

"KLNHAgDA6cVn7NGLP34pSZoQ2VcPtYw2dyAAcADlDvMvv/yyPecALKOknV95eK+STmYoinYeAAC7\n",

"2XrqsB5f/YGKDUMPteikZyJjzR4JABxChS+A97e//e1nt9WuXVvdunVT586dK2UowJFd3c5Pp50H\n",

"AMBuMi6c0ci4+copLNAdDVrqFXbJA0CpCl8Ab/fu3XrnnXeUkZGhw4cPa9asWVq9erWGDBmimTNn\n",

"2mNGwOGMjYiRu82ttJ0HAACV61zeJQ1bMU8ncy6qbZ1gze4zRJ5urEUGgBIVDvNnz55VcnKy3n33\n",

"Xc2ZM0dJSUm6ePGifvzxR82ePdseMwIOp6lvoO5vHiVJmp7MqkYAACpTXlGhRscv0oGsk6pf3U8L\n",

"+41SLXbJA0AZFQ7zhw8fVlBQUOn7QUFBOnr0qPz9/eXp6VmpwwGO7OmIPrTzAABUsmKjWBPWfaKN\n",

"x9NUy9NbC/uNUn12yQPAz1Q4zIeEhOivf/2rMjIylJGRob/97W9q0KCBioqKOIcJLoV2HgCAyvfP\n",

"Lcv0VdqVXfIxQ9XWP9jskQDAIVU4zC9YsEA7d+5UZGSkIiMjtWPHDs2fP18FBQVauHChPWYEHBbt\n",

"PAAAlWfhnh/19vY1kqTXetyvng3YJQ8A11Phq9kHBwfr448/vubHwsLCbnkgwEpK2vmPD2zRtKQ4\n",

"LbqTK9sDAHAz4jJ2688/fiVJejaqnx5s2cnkiQDAsZU7zK9Zs0a9evXS119/fc2P33PPPZU2FGAl\n",

"T0f00WcpSVp1ZK8STx5Sx7qhZo8EAIClJJ/M0BOr/61iw9DgltEaFxFj9kgA4PDKHeYXL16sXr16\n",

"afr06T/7mM1mI8zDZV3dzk9PiqedBwCgAg5dOKORcQuUU1igXg1a6p/df8N1mACgHMod5t99911J\n",

"0qpVq+w2DGBVtPMAAFTc2Su75E/lXlQ7//qaxS55ACi3Cl8Ar7CwUFOnTtWTTz4pSUpJSdHKlSsr\n",

"fTDASspc2T4p3uRpAABwfLmFBRodv1ApV3bJL+g7kl3yAFABFQ7zY8aM0Z49e0ob+oCAAD333HOV\n",

"PhhgNWMjYuRucytt5wEAwLUVG8Wa8P0n2nT8oGp5emvRneySB4CKqnCY//HHH/Xuu+/Kx+fyX05r\n",

"166tgoKCSh8MsJomvgF6oAXtPAAAv2RywlJ9nbZNnm7uei9mmNrUYZc8AFRUhcN8SYgvUVRUpOLi\n",

"4kobCLCyp8Np5wEAuJH5u3/QrB1rJV3eJd+jQQuTJwIAa6pwmA8PD9fixYtVXFysAwcO6LHHHlPv\n",

"3r3tMBpgPbTzAABc3/JDu/R/Gy+vOf5TVD890KKjyRMBgHVVOMxPmzZN69atU2Zmpnr06CF3d3e9\n",

"8sor9pgNsKSr2/ktJ2jnAQCQLu+Sf3L1hyo2DD3SqrPGskseAG6JzTAMozx3/Prrr8u8X/JpJXtA\n",

"q3LP/IQJEzRt2rQq+3pARf3x+0+0ZP8W9Q5ppcV3Pmr2OAAAmCr9wmnd+807OpV7Ub1DWmle3xGs\n",

"oAOAW1TuPfPTp08v/feWLVsUHR1dJtBXZZgHHN3T4TH69ECSVh/Zpy0nDqlTPfbOAwBc09ncbA1b\n",

"fnmXfHt2yQNApSl3mC9ZRSdJUVFR7JYHbqDk3Pkl+7doenIc7TwAwCXlFhbo0fiFSj1/Sg1q+GlB\n",

"v1Gq6elt9lgA4BQqfM689L+X1gO4vpK98yXtPAAArqTYKNb4dR9r84l0+Xr5aFG/RxVc3dfssQDA\n",

"adxUmAfwyxrXCii9Su/05DiTpwEAoGpNSliqbw5ul6ebu96NGabWdYLMHgkAnEq5X2a/bdu20n/n\n",

"5ORo+/btuvraeeHh4ZU7GeAExkb00acHEjl3HgDgUubt2qDZV3bJT739AfWo39zkiQDA+ZQ7zN97\n",

"771l3r/6gnc2m02pqamVNxXgJEra+SX7Ezh3HgDgEpal79T/bfyPJOn5jv11X/MokycCAOdU7jCf\n",

"lpZmzzkAp0U7DwBwFYknD+mpNR/JkKHftuqiMeG9zR4JAJwW58wDdnb1ufPTOHceAOCkDp4/rVFx\n",

"C5RbVKCYhq01udu9XDQZAOyIMA9UgbERfeRuc9OaI/u05US62eMAAFCpzuRma9iKeTqdm62wgBC9\n",

"0/u38mCXPADYFWEeqAJl2/l4k6cBAKDy5FzZJZ92/pRCatTW/L4jVINd8gBgd4R5oIqMjegjD9p5\n",

"AIATKTaKNW7tEiWU7JK/c5SC2CUPAFWCMA9UEdp5AICz+cfmb/Vt+g55ubnrvZhhalWbXfIAUFUI\n",

"80AVepp2HgDgJObuWq85O7+XJE29/UF1Z5c8AFQpwjxQhWjnAQDO4Lv0HfrLxm8kSRM73aXfNI80\n",

"dyAAcEGEeaCK0c4DAKxsy4lDGnNll/zQ1rfpqbBeZo8EAC6JMA9UsTLtfBJ75wEA1pF2/pRGxS1Q\n",

"XlGhYhu20T+63sMueQAwCWEeMEFpO390vxKO084DABzfmdxsDVs+T2fyshUeEKK3ez/CLnkAMBFh\n",

"HjDB1e389GTaeQCAY8spLNCouAU6eOG0Gtasrfl9R7JLHgBMRpgHTDI2IoZ2HgDg8IqKizV27Ufa\n",

"cvKQ/Lx8tKjfo6pXvZbZYwGAyyPMAyYJreWvB1t2kkQ7DwBwXH/f/F99l75TXm7umhs7XC1r1zN7\n",

"JACACPOAqZ4O59x5AIDjem/n93pv13pJ0vSeD6lrcDOTJwIAlCDMAyainQcAOKpvD+7QXzf9V5L0\n",

"YvQA3dsswuSJAABXI8wDJqOdBwA4moTj6Xp67eVd8sPbdNUTHe4weyQAwE8Q5gGT0c4DABxJatYp\n",

"jYq/vEu+b6M2+tttv2aXPAA4IMI84ABo5wEAjuB07kUNWzFPZ/MuKSKwod7u9Vt2yQOAgyLMAw7g\n",

"6nZ+Gu08AMAEOYX5Ghm3QOkXTqtRzTqa33eEqnt6mT0WAOA6CPOAgyhp59ce3a/Nxw+aPQ4AwIUU\n",

"FRfr6TVLlHQyQ35e1bSo3yjVrcYueQBwZIR5wEGUPXc+3uRpAACuwjAM/XXTN1p66PIu+fdjh6sF\n",

"u+QBwOER5gEHMpZ2HgBQxd7b9b3e371BkvRGz4d0W3BTkycCAJQHYR5wII1q+euhltGSaOcBAPb3\n",

"zcHt+tumbyVJL0UP0D3skgcAyyDMAw7m6fDetPMAALtLOJ6ucWuXyJChEW266XF2yQOApRDmAQdD\n",

"Ow8AsLfUrJOlu+T7NWrLLnkAsCDCPOCAaOcBAPZyKqfsLvm3ej0idzf+kxAArIbf3IADurqdZ+88\n",

"AKCy/G+X/BmF1vRnlzwAWBhhHnBQJe38uqMHtIl2HgBwi4qKizVmzUdKPpWh2t7VtehOdskDgJUR\n",

"5gEHVfbcedp5AMDNMwxDL2/6j5Yd2iVvdw+9Hztczf3qmj0WAOAWEOYBBzY2og/tPADgls3ZuU7z\n",

"d/8gSZrR8yF1CWpi7kAAgFtGmAccWMOadTSYdh4AcAu+Sdumv2++vEv+/3UeqLubhps8EQCgMhDm\n",

"AQf3NO08AOAmbTp+UOPWfSxJGtm2m/7QvqfJEwEAKgthHnBwtPMAgJuRknVSj8YvVF5RofqHttNf\n",

"u7BLHgCcCWEesADaeQBARZzMuaBhy+fpXN4lRQY20pu9HmaXPAA4GX6rAxZwdTs/LYl2HgBwfZcK\n",

"Lu+SP3TxjBrXurxLvpoHu+QBwNkQ5gGLKGnnvz92QBsz08weBwDggIqKi/XUmg+19dRh1fGurkX9\n",

"RimwWk2zxwIA2AFhHrCIsufOx5s8DQDA0RiGof/b+LVWZOyWt7uH5sWOUDN2yQOA0yLMAxbydEQf\n",

"ebq5084DAH5m9o51WrDnR9lk08w7Bis6qLHZIwEA7IgwD1gI7TwA4Fq+Tt2qfyRc3iX/f10G6ldN\n",

"wkyeCABgb4R5wGLGhPemnQcAlNqYmabxV3bJP9q2u37X7naTJwIAVAXCPGAxtPMAgBIHzp3Qo/EL\n",

"lV9cpLtC2+vlLnezSx4AXARhHrAg2nkAwMmcCxq2Yp6y8nPUsW6o/tVrMLvkAcCF8BsfsCDaeQBw\n",

"bSW75DMunlXjWgGa13c4u+QBwMXYNczn5eVpzJgxatmypcLCwjR06NAb3g6g/GjnAcA1FRYX6ck1\n",

"/y6zSz7Ah13yAOBqPOz54BMnTpTNZtO+fftks9mUmZl5w9sBlF9JO79470ZNS47Tkrt+b/ZIAAA7\n",

"u7xL/j+Ky9gjb3cPze87Qs38As0eCwBgAruF+ezsbM2dO1eHDx8uvRBLcHDwdW+/nry8POXl5ZW5\n",

"raioyF5jA5bydHgfLdmfoPXHUvRjZqq6BjczeyQAgB29s2OtFl7ZJf+vOx5Wp3rskgcAV2W3l9mn\n",

"pKTI399fkydPVnR0tHr27Kn4+Pjr3n49U6ZMkZ+fX5m3TZs22WtswFJCatbWw5w7DwAu4avUrZqc\n",

"8J0k6eUuv9LAJh1MnggAYCa7hfnCwkKlp6erXbt2SkhI0MyZMzV48GDl5ORc8/bjx49f83FeeOEF\n",

"ZWVllXnr0qWLvcYGLGdMeB95urmXtvMAAOfzQ2aqnrmyS/537Xrod+3ZJQ8Ars5uYT40NFRubm4a\n",

"MmSIJCkqKkpNmzZVRkbGNW/fvn37NR/H29tbvr6+Zd7c3d3tNTZgObTzAODc9p87od9d2SU/oHF7\n",

"/b/OvzJ7JACAA7BbmA8MDFRsbKyWLVsmSUpLS1NaWpq6det2zdvbtm1rr1EAp0c7DwDO6cSlCxq2\n",

"4n1l5eeqU91QzbzjYXbJAwAk2Xk13axZs/Taa68pLCxMgwYN0uzZsxUSEnLd2wHcHNp5AHA+2QV5\n",

"GhE3X4cvnlOTWgGa13eEqnl4mj0WAMBB2HU1XbNmzbRq1apy3w7g5o0J76OPuLI9ADiFwuIiPbn6\n",

"Q20/fUT+3jW06M5R8vepYfZYAAAHwuu0ACdxdTs/LSnO5GkAADfLMAz9+cevFX/48i75eX1HqKkv\n",

"u+QBAGUR5gEnUnLu/IbMVP3AufMAYElvbV+jxXs3yiab3uz1sDrVCzV7JACAAyLMA06kzLnztPMA\n",

"YDlfpCTrn1uWSpL+etvdGtCYXfIAgGsjzANO5mnaeQCwpB8yU/XH7z+RJP2h/e16tF0PkycCADgy\n",

"wjzgZBrUrK1HWnWWRDsPAFax79zx0l3yAxt30J87DzR7JACAgyPMA05oTFhv2nkAsIjjl85r2PJ5\n",

"ysrPVXS9xppxx2C52fhPNADAjfFMATgh2nkAsIbsgjyNWDFfR7LPqalvoN6PHc4ueQBAuRDmASdF\n",

"Ow8Ajq2wuEiPr/q3dpw5qgCfGlrUj13yAIDyI8wDTurqdp698wDgWAzD0Is/fKVVR/bKx91T8/qO\n",

"UBPfALPHAgBYCGEecGIl7fwPmanacCzF7HEAAFe8uW21/r1vk2yy6a1eD6tjXXbJAwAqhjAPOLEy\n",

"584nx5s8DQBAkj5LSdIricskSX+77dfq37i9yRMBAKyIMA84uTFhveVFOw8ADmH9sRQ9+/2nkqTH\n",

"OtyhUe26mzwRAMCqCPOAk6OdBwDHsPfscf1+5SIVFBfp7iZhein6LrNHAgBYGGEecAFP0c4DgKky\n",

"L53XsBXv63x+rjrXa6w3ej7ELnkAwC3hWQRwAbTzAGCeiwV5GrFino5mZ6nZlV3yPuySBwDcIsI8\n",

"4CJo5wGg6hUUF+mxVR9o55ljCvSpqUV3jlIddskDACoBYR5wEbTzAFC1Lu+S/1JrjuyTj7un5vcd\n",

"oca12CUPAKgchHnAhdDOA0DV+de2Vfpw32a52Wx6u/cjiqzbyOyRAABOhDAPuJCr2/lpyXEmTwMA\n",

"zuvTA4l6NXG5JOlvt92jO0PbmTwRAMDZEOYBF/NUeB95ubnrx8w02nkAsIPvjx4o3SX/eIc7NLJt\n",

"N5MnAgA4I8I84GIa1PDTI626SKKdB4DKtudspn6/cpEKjWLd0zRcL7JLHgBgJ4R5wAU9Fd6bdh4A\n",

"Ktmx7CwNWz5PFwrydFtQE027/UF2yQMA7IZnGMAF0c4DQOW6kJ+rEXHzdexSlpr71dV77JIHANgZ\n",

"YR5wUbTzAFA5CoqL9PiqD7SrZJd8v1Gq413d7LEAAE6OMA+4KNp5ALh1hmFo4oYvtOboflXz8NSC\n",

"fiMVWsvf7LEAAC6AMA+4sKvb+fW08wBQYTO2rtSS/Qlys9n0Tu/fKiKwodkjAQBcBGEecGFl2vmk\n",

"OBmGYfJEAGAdn+zfoteTVkiSJnW9V30btTV5IgCAKyHMAy6upJ3feDxNGzJTzR4HACxh3dH9+tP6\n",

"zyRJT4b10rA2XU2eCADgagjzgItrUMNPv21NOw8A5bXrzDH9fuViFRrFurdphCZ26m/2SAAAF0SY\n",

"B6CnwmjnAaA8jmZnafiKebpYkKeuwU01rSe75AEA5uDZB4Dq084DwC+6kJ+rESvmKfPSebX0q6f3\n",

"YobJ293D7LEAAC6KMA9AEu08ANxIQXGRHlv1gXafzVTdajW1sN9I1WaXPADARIR5AJJo5wHgegzD\n",

"0PPrP9fakl3yfUeqEbvkAQAmI8wDKEU7DwA/Nz05Xh8f2CI3m02zeg9ROLvkAQAOgDAPoFTZdn4F\n",

"7TwAl/fx/gRNS46TJE3uNkixjdqYPBEAAJcR5gGU8b92/qA2HEsxexwAMM3aI/v13PrPJUljwntr\n",

"aOvbTJ4IAID/IcwDKKNMO5/MufMAXNOuM0f1h1WXd8kPahap5zreafZIAACUQZgH8DNPhfWWt7sH\n",

"7TwAl3R5l/x8XSzIU7fgZpp6+wPskgcAOByemQD8TP0afvptK9p5AK7nfH6uhl/ZJd+qdj29GzOU\n",

"XfIAAIdEmAdwTU+G9aKdB+BS8osK9diqxdpzNlP1qtXSwn6j2CUPAHBYhHkA10Q7D8CVGIah5zd8\n",

"rnVHD6i6h5cW9B2phjXrmD0WAADXRZgHcF208wBcxdTkOH1yIFHuNjfN6jNEYYEhZo8EAMANEeYB\n",

"XNfV7fxU2nkATuqjfZv1RnK8pMu75GMatjZ5IgAAfhlhHsANlbTzm44f1HraeQBOZvWRfXp+wxeS\n",

"pLHhfTTkympOAAAcHWEewA1x7jwAZ7Xz9FE9tnKxioxi3dc8Sn9ilzwAwEII8wB+0VPhvWnnATiV\n",

"oxfPaXjcfGUX5qt7cDO93uN+2Ww2s8cCAKDcCPMAflFwdV8NoZ0H4CSy8nI0bMU8Hb90Xq1rB+nd\n",

"mGHyYpc8AMBiCPMAyuVJ2nkATiC/qFB/WLVYe88dV9CVXfJ+3tXMHgsAgAojzAMoF9p5AFZnGIb+\n",

"tP4zrT+WohoeXlrQb6RCatY2eywAAG4KYR5AudHOA7Cy15NW6LOUpNJd8h0C2CUPALAuwjyAcqOd\n",

"B2BV/963STO2rpQkTek+SH3YJQ8AsDjCPIAKubqd//7YAbPHAYBftOrwXr2w4UtJ0riImNJ1mwAA\n",

"WBlhHkCFlGnnk2jnATi2HaeP6PFVH6jIKNb9zaP0bFQ/s0cCAKBSEOYBVFhJO7/5RDrtPACHdeTi\n",

"OY1YcXmXfI/6zfUau+QBAE6EMA+gwoKr+2po69sk0c4DcExZeTkavmKejudcYJc8AMApEeYB3JQn\n",

"w3rRzgNwSHlFhfrdykWXd8lX99WifqPk6+Vj9lgAAFQqwjyAmxJEOw/AARmGoWe//1Q/ZKaqpqe3\n",

"FvUbqQbskgcAOCHCPICbRjsPwNG8lrhcX6Qmy93mptl9hqidfwOzRwIAwC4I8wBuGu08AEfywd5N\n",

"mrltlSTple6/Ua+QViZPBACA/RDmAdwS2nkAjmDl4b168YcvJUnjI2P1cKvO5g4EAICdEeYB3JKr\n",

"2/mptPMATLD91P92yT/YoqP+GNnX7JEAALA7wjyAW1bSziecSNe6o7TzAKrO4YtnNSJuvi4V5qtn\n",

"gxZ6pft97JIHALgEwjyAW1bm3Plk2nkAVeNc3iUNWz5PJ3IuqE2dYM3uM5Rd8gAAl0GYB1ApaOcB\n",

"VKWSXfL7s04ouLqvFrJLHgDgYgjzACpFUHVfDaOdB1AFio1iTfj+E/2Ymaaant5a2G+UGtTwM3ss\n",

"AACqFGEeQKV5gnYeQBV4NXG5vkrdKg+bm+b0Gap2/vXNHgkAgCpHmAdQaWjnAdjb4j0b9ea21ZKk\n",

"V3vcpztCWpo7EAAAJiHMA6hUtPMA7CU+Y49e/PFLSdKEyL56qGW0uQMBAGAiwjyASnV1Oz81aQXt\n",

"PIBKse3UYT2x+t8qNgw91KKTnomMNXskAABMRZgHUOlK2vktJw9p7dH9Zo8DwOIyLpwp3SV/R4OW\n",

"eqUHu+QBACDMA6h0Zc6dT+LceQA371zeJQ1bMU8ncy6qbZ1gze4zRJ5u7maPBQCA6QjzAOziybDe\n",

"tPMAbkleUaFGxy/SgayTql/dTwv7jVItdskDACCJMA/ATupVr6XhbbpKop0HUHHFRrEmrPtEG4+n\n",

"qdaVXfL12SUPAEApwjwAu3miA+fOA7g5/9yyTF+lXd4l/27MMLX1DzZ7JAAAHAphHoDd0M4DuBkL\n",

"9/yot7evkSS9fvv9ur1BC5MnAgDA8RDmAdgV7TyAiojL2K0///iVJOnZqH56oEUnkycCAMAxEeYB\n",

"2BXtPIDy2nrVLvnBLaM1LiLG7JEAAHBYhHkAdnd1O7+Gdh7ANRy6cEYjVsxXTmGBejVoqX92/w27\n",

"5AEAuAG7hvm8vDyNGTNGLVu2VFhYmIYOHSpJatKkiVq3bq3IyEhFRkZqyZIl9hwDgMlo5wHcyNkr\n",

"u+RP5V5UO//6msUueQAAfpGHPR984sSJstls2rdvn2w2mzIzM0s/tmTJEkVGRtrzywNwIE906KVF\n",

"ezYq8Uo73zukldkjAXAAuYUFGh2/UClZJ9WgBrvkAQAoL7s189nZ2Zo7d64mTZpU+jK54GDWygCu\n",

"6nI7f5sk2nkAlxUbxZrw/SfadPxg6S754Oq+Zo8FAIAl2C3Mp6SkyN/fX5MnT1Z0dLR69uyp+Pj4\n",

"0o8PHz5cYWFhGj16tE6ePHndx8nLy9P58+fLvBUVFdlrbAB29HiHXvJx9yxt5wG4tikJy/R12jZ5\n",

"urnrvZhhalOHP/oDAFBedgvzhYWFSk9PV7t27ZSQkKCZM2dq8ODBOn78uNauXatt27YpMTFRgYGB\n",

"GjFixHUfZ8qUKfLz8yvztmnTJnuNDcCOaOcBlJi/+we9s+PyLvnXetyvHuySBwCgQuwW5kNDQ+Xm\n",

"5qYhQ4ZIkqKiotS0aVNt375doaGhkiRPT0+NHz9e69atu+7jvPDCC8rKyirz1qVLF3uNDcDOaOcB\n",

"LD+0S/+38WtJ0nMd79QDLTqaPBEAANZjtzAfGBio2NhYLVu2TJKUlpamtLQ0tW3bVufOnSu934cf\n",

"fqioqKjrPo63t7d8fX3LvLm7c4VbwKpo5wHXlnwyQ0+u/lDFhqFHWnXW0+F9zB4JAABLsuvV7GfN\n",

"mqXRo0fr+eefl5ubm2bPnq28vDzdfffdKioqkmEYatasmRYuXGjPMQA4mMc79NLCK1e2X31kn/o0\n",

"bG32SACqQPqF0xoZt0C5RQXqHdJKk7sNYpc8AAA3ya5hvlmzZlq1atXPbk9KSrLnlwXg4Era+Tk7\n",

"v9e05Dj1DmnFf9ADTu5sbraGLb+8S749u+QBALhldnuZPQDcyBNhl8+dTzqZodVH9pk9DgA7yi0s\n",

"0KPxC5V6/pRCatTWgn6jVNPT2+yxAACwNMI8AFPUrVZLI9p0lSRNS+bcecBZFRvFGr/uY20+kS5f\n",

"Lx92yQMAUEkI8wBM83jYHbTzgJOblLBU3xzcLk83d70bM0yt6wSZPRIAAE6BMA/ANLTzgHObt2uD\n",

"Zu9YK0maevsD6lG/uckTAQDgPAjzAExFOw84p2XpO/Xypv9Ikp7v2F/3Nb/+GloAAFBxhHkApqKd\n",

"B5xP4slDemrNRyo2DA1p1UVjwnubPRIAAE6HMA/AdLTzgPM4eP60Rl3ZJR/TsLUmdbuX1ZMAANgB\n",

"YR6A6a5u56cm0c4DVnUmN1vDVszT6dxshQWE6J3ev5UHu+QBALALwjwAh1DSziefytAq2nnAcnKu\n",

"7JJPO39KDWvW1vy+I1SDXfIAANgNYR6AQyhz7jztPGApxUaxxq1dooQT6fK7sks+iF3yAADYFWEe\n",

"gMN4IqwX7TxgQf/Y/K2+Td8hLzd3vRc7XK1qs0seAAB7I8wDcBiB1WpqRNtukmjnAauYu2u95uz8\n",

"XpI09fYH1S24mckTAQDgGgjzABzKEx04dx6wiqXpO/WXjd9IkiZ2uku/aR5p7kAAALgQwjwAh0I7\n",

"D1jDlhOH9NSaD2XI0NDWt+mpsF5mjwQAgEshzANwOLTzgGNLO39Ko+IWKK+oULEN2+gfXe9hlzwA\n",

"AFWMMA/A4dDOA47rTG62hi2fpzN52QoPCNHbvR9hlzwAACYgzANwSFe38ysP7zV7HAC6vEt+VNwC\n",

"Hbxw+sou+ZHskgcAwCSEeQAOqUw7n0w7D5itqLhYY9d+pC0nD8nPq5oW9XtU9arXMnssAABcFmEe\n",

"gMN6osMdqubhqa2nDtPOAyb7++b/6rv0nfJyc9fc2GFqWbue2SMBAODSCPMAHFZgtZoa0YZ2HjDb\n",

"ezu/13u71kuSpvd8SF3ZJQ8AgOk8zB4AAG7k8Q53aMGeH0rb+dhGbcweCbAswzB0qTBf5/NzdT4/\n",

"Vxfyc5WVn6MLBbmlt53Pz9GF/LLvJ57MkCS9GD1A9zaLMPm7AAAAEmEegIMraedn7ViraclximnY\n",

"mhVYcFmFxUVXAnjulcCdo/MFPwnmPwniFwryLt/vym1FRvFNfe0RbbrqiQ53VPJ3BAAAbhZhHoDD\n",

"o52HMzAMQzmFBf9rwvNyrwTxnBu24hcK/hfeLxXmV8os7jY31fLykZ+Xj2p5+sjXy+fK+9VUy+vy\n",

"+5ffqqmWp4/q1/BTZGBD/pAGAIADIcwDcHi083AEZrbiP1Xdw+snYbxaaQCv5fWT9z1/HtKre3jx\n",

"MwQAgMUR5gFYAu08bsWNWvFrBvS83Cvnkf8viJvVivuV/PvK59T08pGnm3ulzAIAAKyLMA/AEmjn\n",

"XVtJK37+Gi9Pr+pWvJqHp3y9qtGKAwAAUxHmAVgG7bw1Wb0Vvzqg16IVBwAADoIwD8AyAqvV1Mg2\n",

"3fXOjjW081Xoeq34NS/Ullc1rbjvT4I4rTgAAHA1hHkAlvJ4WE/N37OBdr6caMUBAACcE2EegKUE\n",

"+LhWO1/RVvxCwU9uz89VoZ1b8VpXhXBacQAAgKpBmAdgOVZp50ta8es24VeFblpxAAAAVARhHoDl\n",

"VFU7b61W/H9B3PcaH6MVBwAAcC6EeQCW9EvtfHlb8QsFZdealaw5q8xW3M1m+8kqM1pxAAAA3BrC\n",

"PABLurqdn7jhCzXzC3SYVrz0/Ssva6cVBwAAQGUjzAOwrMfDemrhnh907FKWjl3KuuZ9Slrxq4P4\n",

"tV6GTisOAAAAKyHMA7CsAJ+a+nTAY0o6lUErDgAAAJdCmAdgaWGBIQoLDDF7DAAAAKBKuZk9AAAA\n",

"AAAAqBjCPAAAAAAAFkOYBwAAAADAYgjzAAAAAABYDGEeAAAAAACLIcwDAAAAAGAxhHkAAAAAACyG\n",

"MA8AAAAAgMUQ5gEAAAAAsBjCPAAAAAAAFkOYBwAAAADAYgjzAAAAAABYDGEeAAAAAACLIcwDAAAA\n",

"AGAxhHkAAAAAACyGMA8AAAAAgMUQ5gEAAAAAsBjCPAAAAAAAFkOYBwAAAADAYmyGYRhmD1FR9913\n",

"n5o0aWL2GOVSVFSkTZs2qUuXLnJ3dzd7HPwCjpf1cMysh2NmLRwv6+GYWQ/HzHo4ZtZixePVuHFj\n",

"jRs37ob3sWSYt5Lz58/Lz89PWVlZ8vX1NXsc/AKOl/VwzKyHY2YtHC/r4ZhZD8fMejhm1uKsx4uX\n",

"2QMAAAAAYDGEeQAAAAAALIYwDwAAAACAxRDm7czb21svv/yyvL29zR4F5cDxsh6OmfVwzKyF42U9\n",

"HDPr4ZhZD8fMWpz1eHEBPAAAAAAALIZmHgAAAAAAiyHMAwAAAABgMYR5AAAAAAAshjBvJydOnFBQ\n",

"UJAGDRp0w/vcddddatmypTp06KC1a9dW3YAo9dZbbyksLEyRkZHq0KGDZs6ced37NmnSRK1bt1Zk\n",

"ZKQiIyO1ZMmSKpwUJSpyzPbv36/u3burVatW6ty5s3bu3FmFk0KSZs6cqQ4dOigsLEzh4eFavHjx\n",

"de/bu3dvNW3atPRnbPr06VU4KUpU5JjxXOYY/vvf/6pTp07y9vbW+PHjb3hfnsvMV5HjxfOYYygu\n",

"LtbTTz+t5s2bq0WLFnrzzTeve19+xsxT3p+XuXPnqmXLlmrevLl+//vfq6CgoIonrSQG7GLQoEHG\n",

"o48+atx7773Xvc+oUaOMl19+2TAMw9i0aZMREhJi5OfnV82AKHXu3LnSf2dlZRmNGjUyEhMTr3nf\n",

"xo0bG0lJSVU0Ga6nIsesT58+xrx58wzDMIxPPvnEiI6OrooRcZW4uLjSY3bo0CEjICDAOHDgwDXv\n",

"26tXL+OLL76owulwLRU5ZjyXOYa9e/caycnJxksvvWSMGzfuhvflucx8FTlePI85hgULFhgxMTFG\n",

"YWGhcfr0aSM0NNTYsWPHNe/Lz5h5yvPzkpqaatSvX984duyYUVxcbPz617823nzzzSqetHLQzNvB\n",

"3Llz1bRpU/Xs2fOG9/v444/1+OOPS5I6d+6sBg0aaM2aNVUxIq7i5+dX+u/s7Gzr/mXOhZT3mJ04\n",

"cUIJCQkaOnSoJOn+++9XRkaGDhw4UCVz4rLY2NjSY9aoUSMFBwcrIyPD5KlwIxU5ZjyXOYZWrVop\n",

"IiJCHh4eZo+Ccijv8eJ5zHEsWbJEv//97+Xu7i5/f38NHjxYH374odlj4Srl/Xn59NNPdc899yg4\n",

"OFg2m02PP/64ZY8lYb6SpaWladasWZo0adIN73f69GkVFBQoODi49LYmTZro0KFD9h4R1/Dpp5+q\n",

"ffv2atKkiZ599llFRUVd977Dhw9XWFiYRo8erZMnT1bhlLhaeY5ZRkaG6tevX/ofSzabTaGhofyc\n",

"mSguLk5nz55V586dr3ufiRMnKiwsTIMHD1ZqamoVTodrudEx47nMunguswaexxzHoUOH1Lhx49L3\n",

"f+l3HT9jVa+8Py8VPZaOjDBfQd26dVNgYOA13zIyMvToo4/qzTffVLVq1cweFVf80jGTpAceeEA7\n",

"d+7U3r17tXjxYu3du/eaj7V27Vpt27ZNiYmJCgwM1IgRI6ryW3EZlXnMYH/lOV6StH37do0aNUpL\n",

"lixRjRo1rvlYixYt0p49e7Rt2zb17NlTd999d1V9Gy6lMo8ZqkZ5j1l58Fxmf5V5vFA1+BmDFfFa\n",

"rAr64YcfrvuxrKwsbdu2TYMHD5YkXbx4UZcuXVJsbKzi4+PL3DcgIEAeHh7KzMwsbTQOHjyo0NBQ\n",

"+w3vom50zH6qSZMmuu222/TNN9+odevWP/t4yfHx9PTU+PHj1apVq0qbE/9TWcesUaNGOnbsmAoL\n",

"C+Xh4SHDMHTo0CF+zipZeY7Xrl27dPfdd+v999/X7bffft37NWrUSNLlv6aPGTNGzz77rE6fPq2A\n",

"gIBKmxeVd8x4Lqs6Ffm9+Et4LrO/yjpePI9VnV86ZqGhoUpPT1e3bt0k3fh3HT9j5ijvz0toaKhS\n",

"UlJK37fy8xbNfCXy8/PT6dOndfDgQR08eFCvv/667rzzzp8F+RIPPvigZs2aJUnavHmzjhw5ol69\n",

"elXlyNDl/2AtcfLkSa1cuVLh4eE/u192drbOnTtX+v6HH354w5fjw37Ke8zq1aunjh07ll6J+7PP\n",

"PlPDhg3VokWLKpsV0u7duzVw4EDNmTNH/fr1u+79CgsLdfz48dL3P/vsMwUFBRHkTVDeYybxXGY1\n",

"PJdZC89jjuPBBx/Uu+++q6KiIp05c0ZLliwpLfCuxs+Yecr783L//ffr66+/VmZmpgzD0KxZs/Tw\n",

"ww+bMfKtM/f6e85t3rx5Za5mv3nzZmPAgAGl72dmZhr9+vUzWrRoYbRr185YuXKlCVPiD3/4g9G2\n",

"bVsjIiLCCA8PN956663Sj3311VfG6NGjDcMwjJSUFCMyMtIICwszOnToYNxzzz1GWlqaSVO7tvIe\n",

"M8MwjD179hhdu3Y1WrZsaXTq1MnYtm2bGSO7tL59+xq1a9c2IiIiSt+WLl1qGEbZ34sXL140OnXq\n",

"ZHTo0MEIDw83YmJijOTkZDNHd1nlPWaGwXOZo4iLizNCQkKMWrVqGTVr1jRCQkKMr776yjAMnssc\n",

"UXmPl2HwPOYoCgsLjSeffNJo2rSp0axZM+ONN94o/Rg/Y47jej8vo0ePLv0ZMwzDmDNnjtGsWTOj\n",

"WbNmxqOPPmrZLSw2wzAMs/+gAAAAAAAAyo+X2QMAAAAAYDGEeQAAAAAALIYwDwAAAACAxRDmAQBw\n",

"EU2aNFFycnKFPufZZ5/VX/7yF7vMAwAAbh5hHgAAAAAAiyHMAwDgYnr37q1nn31WPXv2VPPmzfX4\n",

"44+XfuzYsWPq37+/2rVrp759++rw4cOlHysoKNDEiRPVpUsXRUZG6qGHHtLZs2d18uRJNWnSRD/+\n",

"+KMk6dNPP1VERIRycnKq/HsDAMBVEOYBAHBBKSkpWrVqlXbs2KFly5bphx9+kCSNHTtWXbp00a5d\n",

"u7RgwQLFx8eXfs5rr72mGjVqaNOmTUpOTlZYWJj+/Oc/q27dulq0aJGGDBmiTZs2afz48frkk09U\n",

"rVo1s749AABuycyZM9WhQweFhYUpPDxcixcvvu59e/furaZNmyoyMlKRkZGaPn16hb7WvHnzZLPZ\n",

"9OWXX1bo8zwqdG8AAOAUBg8eLA8PD3l4eCgyMlIpKSnq1q2b4uPj9frrr0uSQkJCdM8995R+zpdf\n",

"fqmsrCx99tlnkqT8/Hw1adJEktSzZ0+NHj1a3bt318KFC9WqVasq/54AALgZvXv31vz580uf0ySp\n",

"ffv2Wr9+vfz8/JSRkaGoqCh169ZNzZs3v+ZjTJ8+XYMGDarw1z548KDeffddde3atcKfSzMPAIAL\n",

"8vHxKf23u7u7CgsLr3k/m81W+m/DMPSvf/1LycnJSk5O1q5du/Ttt9+WfjwpKUl169ZVRkaG/QYH\n",

"AKAKxMbGys/PT5LUqFEjBQcH39Tz2/79+/WrX/1KnTt3Vnh4uN58883SjxUXF+t3v/ud/vWvf8nb\n",

"27vCj02YBwAApfr27av3339f0uXz57/++uvSjw0aNEjTp0/XpUuXJEmXLl3Szp07JUlvvvmmzp49\n",

"q61bt2r27Nlav3591Q8PAIAdxMXF6ezZs+rcufN17zNx4kSFhYVp8ODBSk1NlSQVFRXpkUce0dSp\n",

"U7V582b9+OOPmjNnjjZv3ixJmjZtmnr06KFOnTrd1Fy8zB4AAJSaMWOGRo4cqXbt2ikkJEQxMTGl\n",

"H3v++eeVl5en2267rbSxL7nt9ddf18aNG1WvXj0tXrxYQ4cO1ebNmxUQEGDWtwIAwHUNHz5c27Zt\n",

"kyQdOHBAAwcOlJeXl6TLp5WVvOR++/btGjVqlJYsWaIaNWpc87EWLVqkRo0ayTAMvfXWW7r77ru1\n",

"a9cu7d27Vzt37tTDDz9cet8LFy5o165dqlatmj777DOtXbv2pr8Hm2EYxk1/NgAAAAAAFnatc+Yl\n",

"adeuXRowYIDee+899evXr9yP5+PjoyNHjigzM1N33nmnjhw58rP7vPPOO/rb3/5W+vL6zMxM+fr6\n",

"6q9//aueeOKJcn0dXmYPAAAAAMBVdu/erYEDB2rOnDk3DPKFhYU6fvx46fufffaZgoKCFBAQoNat\n",

"W8vX11fz5s0r/fiBAwd05swZPfHEEzp27JgOHjyogwcPqmvXrpozZ065g7xEmAcAAAAAoIyxY8cq\n",

"KytLzz//fOnKuWXLlkmSEhISNHDgQElSXl6efvWrXyksLEwRERF6++23S6834+HhoW+++Uaff/65\n",

"wsPD1b59e40ePVo5OTmVMiMvswcAAAAAwGJo5gEAAAAAsBjCPAAAAAAAFkOYBwAAAADAYgjzAAAA\n",

"AABYDGEeAAAAAACLIcwDAAAAAGAxhHkAAAAAACyGMA8AAAAAgMUQ5gEAAAAAsBjCPAAAAAAAFvP/\n",

"AZgrA9rFJpXOAAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-c1ef8b9e-949f-4f5b-b1a9-fc738ca53eb5\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-c1ef8b9e-949f-4f5b-b1a9-fc738ca53eb5\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"import seaborn as sns\n",

"def \_plot\_series(series, series\_name, series\_index=0):\n",

" palette = list(sns.palettes.mpl\_palette('Dark2'))\n",

" xs = series['Index']\n",

" ys = series['Weight(Pounds)']\n",

" \n",

" plt.plot(xs, ys, label=series\_name, color=palette[series\_index % len(palette)])\n",

"\n",

"fig, ax = plt.subplots(figsize=(10, 5.2), layout='constrained')\n",

"df\_sorted = \_df\_17.sort\_values('Index', ascending=True)\n",

"\_plot\_series(df\_sorted, '')\n",

"sns.despine(fig=fig, ax=ax)\n",

"plt.xlabel('Index')\n",

"\_ = plt.ylabel('Weight(Pounds)')"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-33b0878e-6c76-4d19-8641-c5d0e218655a\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAB0CElEQVR4nO3deXxU9b3/8fdkmyxkgbBmI2wBAlkA2fclgGiFKhZRVAQUtRYt\n",

"2lbvba+1tdr+LoJa3FHcEberVi1L2ALIqoQtARIgZA8hkEDInjm/P4JToqAJZHIyyev5eMxDMmdm\n",

"8o7nkUze+XzPORbDMAwBAAAAAACn4WJ2AAAAAAAAUD+UeQAAAAAAnAxlHgAAAAAAJ0OZBwAAAADA\n",

"yVDmAQAAAABwMpR5AAAAAACcDGUeAAAAAAAnQ5kHAAAAAMDJNLsy/9xzz5kdAQAAAAAAh2p2Zf7E\n",

"iRNmRwAAAAAAwKGaXZkHAAAAAKC5o8wDAAAAAOBkKPMAAAAAADgZyjwAAAAAAE6GMg8AAAAAgJOh\n",

"zAMAAAAA4GQo8wAAAAAAOBnKPAAAAAAAToYyDwAAAACAk6HMAwAAAADgZCjzAAAAAAA4Gco8AAAA\n",

"AABOhjIPAAAAAICTocwDAAAAAOBkKPMAAAAAADgZyjwAAAAAAE6GMg8AAAAAgJOhzAMAAAAA4GQo\n",

"8wAAAAAAOBnKPAAAAGCy9HOnNeSjv+vhLR+pylZtdhwAToAyDwAAAJjsmT1rlVlcqJUp3+qRLZ/I\n",

"ZtjMjgSgiaPMAwAAACY6WpSv/zuWKElytbjo46Pf6b+3fS7DMMwNBqBJo8wDAAAAJno2cZ1shqG4\n",

"0N56btSvZJFF7xzeoSd3fU2hB3BZbmYHAAAAAFqqlMKT+vz4XknSwtgJimobrLKqSj2y9RO9cnCz\n",

"vN099HC/OJNTAmiKmMwDAAAAJvl+Kj8pLFJRbYMlSbdEDNRfBv9CkrQkcZ1e2r/JzIgAmiiHlvkF\n",

"CxYoPDxcFotFiYmJ9vsnTpyo6OhoxcbGauTIkdqzZ48kqaysTNOmTVNERIRiYmIUFxen1NRUR0YE\n",

"AAAATHH4TJ6+OL5PkvRwvwm1ts2JHK5HB0yWJP1t97/1ZvK2Rs8HoGlzaJmfPn26tmzZos6dO9e6\n",

"/8MPP9S+ffuUmJiohQsXavbs2fZt99xzjw4fPqy9e/dq6tSpmjdvniMjAgAAAKZ4NnGdDBm6tnMf\n",

"RbYJ+tH2B6LH6MGYcZKkP27/XCtTdjd2RABNmEPL/KhRoxQSEvKj+wMCAuz/LioqksVikSR5enpq\n",

"ypQp9o+HDBmitLS0y75+eXm5zp49W+tWXc11OQEAANC0JZ/O1b/Saqbyv42dcNnHPdIvTnf3GSFJ\n",

"+t3WT/TFsb2Nkg9A02faCfDuuOMObdiwQZL09ddfX/Ixzz33nKZOnXrZ13j66af1xBNP1LpvyJAh\n",

"DRcSAAAAcIAlifGSpOvDoxTZptNlH2exWPQ/A69TaVWl3j28QwsSVsrTzV0TwyIbKyqAJsq0E+C9\n",

"/fbbysjI0JNPPqk//OEPP9r+1FNPKTU1VU8//fRlX+Oxxx5TUVFRrdugQYMcGRsAAAC4Kkmns/X1\n",

"iQOyyPKTU/nvWSwWPTV0qm7q1k9Vhk33bnhPm7KONEJSAE2Z6Wezv/POO7VhwwYVFBTY71u0aJE+\n",

"/fRT/fvf/5a3t/dln2u1WuXn51fr5urq2hixAQAAgCuyeM86SdIvukSpZ+sOdXqOi8VFz4yYrimd\n",

"+6rCVq25697RjtzjjowJoIlr9DJfWFio7Oxs+8efffaZAgMD1aZNG0nS4sWLtWLFCq1du7bWsfUA\n",

"AACAsztQkKVV6QfrPJW/mJuLq5aOvkXjQnqqrLpSd8a/qT35GQ5KCqCpc2iZnz9/vkJCQpSZmalJ\n",

"kyape/fuKioq0rRp0xQVFaWYmBgtXbpUX375pSwWizIzM/Xwww+rsLBQY8eOVWxsrAYPHuzIiAAA\n",

"AECjWbyn5lj5qV1j1COgfb2f7+HqplfGztLwTt1UXFmuWWveUNLpnIaOCcAJWAzDMMwO0ZAWLlyo\n",

"xYsXmx0DAAAAqGXfqUxN+ddSuVgs2vDLherm3+6KX+t8ZbluW/OGdp88oUBPH31y7Xx1v4I/DgBw\n",

"XqYfMw8AAAC0BM9cmMpP6xp7VUVeknzcrXo77i5FBQaroOy8ZqxephPnCn7+iQCaDco8AAAA4GB7\n",

"8jO0LvOQXC0ueihmfIO8pp+Hp96bOEc9Azoor+Ssblm1TNnFhQ3y2gCaPso8AAAA4GDfHyt/Y7dY\n",

"dfVv22Cv28bTRysmzVO4b6Ayis/oltXLlF96rsFeH0DTRZkHAAAAHOjbk+nakHVYrhYXPdhAU/mL\n",

"tff21crJdyvYJ0DHzp7SLauW6UzZ+Qb/PACaFso8AAAA4ECL96yVJE3v3l/hfoEO+RzBrQK0cvLd\n",

"6uDlq8OFeZq1drnOVpQ55HMBaBoo8wAAAICD7M47oU3ZKXKzuOjBmHEO/VzhfoFaMXme2lh9tPdU\n",

"pu5cu1wllRUO/ZwAzEOZBwAAABzkmcSaqfzNPQYozLeNwz9fREAHrZg0V/4entp18oTmrn9bZVWV\n",

"Dv+8ABofZR4AAABwgB25x7U5O1XuLq5aED220T5vn8AgvTNxjnzcPLQ5O1X3bnxPFdVVjfb5ATQO\n",

"yjwAAADgAM9cOFZ+Ro9rFNoIU/mL9W8XpjfjZsvq6qb4jENakLBSVbbqRs0AwLEo8wAAAEAD+ybn\n",

"qL7JPSZ3F1f9phGn8hcb2rGrlo27Xe4urvoybb8e2fKJbIbNlCwAGh5lHgAAAGhAhmHomQvXlZ8Z\n",

"MVDBrQJMyzI2pKdeGnOrXC0u+vjod/rj9i9kGIZpeQA0HMo8AAAA0IC+yTmqHXnH5eHiqgdMmspf\n",

"bHLnPnpu1K9kkUVvH9quJ3f/m0IPNAOUeQAAAKCBGIahZxJrpvK39hykIB9/kxPVmNY1Vv9v+I2S\n",

"pFcOJGjxhYwAnBdlHgAAAGggW3JStTMvTVZXtyYxlb/YzIiB+svgX0iSliSu00v7N5mcCMDVoMwD\n",

"AAAADcAwDC36ruYM9rN6DlZHbz+TE/3YnMjhenTAZEnS33b/W28mbzM5EYArRZkHAAAAGsCm7BR9\n",

"m58uq6ub7o8abXacy3ogeowejBknSfrj9s+1MmW3yYkAXAnKPAAAAHCVas5gXzOVv6PXEHVoglP5\n",

"iz3SL07zIodLkn639RN9cWyvyYkA1BdlHgAAALhK6zMPa09+hjxd3Zv0VP57FotFjw+6XrdFDJLN\n",

"MLQgYaXWpieZHQtAPVDmAQAAgKtgGIb97PB39h6qdl6+JieqG4vFoqeHTdON3fqpyrBp/ob3lJCV\n",

"YnYsAHVEmQcAAACuwrrMQ9p7KlNebu66r+8os+PUi4vFRYtHTNeUzn1VYavWnHVva0fucbNjAagD\n",

"yjwAAABwhWqOla+Zys/uNUxtvVqZnKj+3FxctXT0LRoX0lNl1ZW6M/5N7cnPMDsWgJ9BmQcAAACu\n",

"0Jr0JO0vyJKPm4fui3KuqfzFPFzd9MrYWRreqZuKK8s1a80bSjqdY3YsAD+BMg8AAABcgYuPlb8r\n",

"cpjaePqYnOjqeLm5643xd2hAuzAVVZRq5uplSi08aXYsAJdBmQcAAACuwKr0gzp4Oket3K2a32ek\n",

"2XEahI+7VW/H3aWowGAVlJ3XjNXLdOJcgdmxAFwCZR4AAACoJ5thsx8rP6f3MLV28qn8xfytXnpv\n",

"4hz1DOigvJKzumXVMmWfLzI7FoAfoMwDAAAA9fT1iYM6dCZXvu5W3d23eUzlL9bG00fvT5qrcN9A\n",

"ZRSf0S2rXlN+6TmzYwG4CGUeAAAAqAebYdOSC1P5uX1GqLXV2+REjtHB208rJ9+tYJ8AHTt7SjNX\n",

"v64zZefNjgXgAso8AAAAUA9fpR3Q4cI8+Xl46u7IEWbHcajgVgFaOfludfDy1aEzuZq1drnOVpSZ\n",

"HQuAKPMAAABAnVXbbFp8YSp/d58R8rd6mZzI8cL9ArVi8jy1sfpo76lM3bl2uUoqK8yOBbR4lHkA\n",

"AACgjv6Vtk8pRSfl7+Gpuc18Kn+xiIAOen/SHPl7eGrXyROau/5tlVVVmh0LaNEo8wAAAEAdVNts\n",

"WpK4TpJ0T5+R8vPwNDlR4+obGKy34+bIx81Dm7NTde/G91RpqzY7FtBiUeYBAACAOvjs+F4dLcpX\n",

"gNVbcyKHmx3HFAPah+nNuNmyuropPuOQFmxaqWqbzexYQItEmQcAAAB+RpWtWs9emMrf23ekfFvY\n",

"VP5iQzt21bJxt8vdxVX/StunR7Z+LJtBoQcaG2UeAAAA+BmfHUvU8bOn1Nrqrdm9h5kdx3RjQ3rq\n",

"pTG3ytXioo9Sv9Mft38hwzDMjgW0KJR5AAAA4CdU2aq1JHG9JOnevqPUyt1qcqKmYXLnPnpu1K9k\n",

"kUVvH9quJ3f/m0IPNCLKPAAAAPATPjm6RyfOFSjQ00ezew81O06TMq1rrP7f8BslSa8cSNDixHiT\n",

"EwEtB2UeAAAAuIxKW7WeuzCVv6/vaPkwlf+RmRED9cTgX0iSliSu00v7N5mcCGgZKPMAAADAZXyc\n",

"+p3Si0+rrWcr3dFriNlxmqy5kcP16IBJkqS/7f633kreZnIioPmjzAMAAACXUFFdpef21pzB/tfR\n",

"o+Xt7mFyoqbtgeixWhA9VpL039s/14cpu01OBDRvlHkAAADgEj5M/VaZxYVq7+WrWT2ZytfF7/pP\n",

"1LzI4ZKkR7Z+oi+O7TU5EdB8UeYBAACAHyivrtI/926QJN0fNVpebu4mJ3IOFotFjw+6XrdFDJLN\n",

"MLQgYaXWpieZHQtolijzAAAAwA+sTNmtrPOF6uDlq9t6DjY7jlOxWCx6etg03ditn6oMm+ZveE8J\n",

"WSlmxwKaHco8AAAAcJGLp/IPRI9lKn8FXCwuWjxiuq7t3EcVtmrNWfe2duQeNzsW0KxQ5gEAAICL\n",

"rDiySzklRero7aeZEQPNjuO03Fxc9cLomRob3FNl1ZW6M/5NJeZnmB0LaDYo8wAAAMAFZVWV+ue+\n",

"mqn8b6LHypOp/FXxcHXTq+NmaVjHriquLNdta95Q0ukcs2MBzQJlHgAAALjgvSM7lVdyVkE+/rqF\n",

"qXyD8HJz1/IJd2pAuzAVVZTq1tWvK7XwpNmxAKdHmQcAAAAklVZV6oV9GyVJC6LHyerqZm6gZsTH\n",

"3aq34+5SVGCwTpUV65bVy5R+7rTZsQCnRpkHAAAAJL13eIdOlp5TSKsA/arHALPjNDv+Vi+9N3GO\n",

"egZ0UG7JWc1Y9ZqyzxeZHQtwWpR5AAAAtHilVRV6Yf9GSdJvosfJg6m8Q7Tx9NH7k+Yq3DdQGcVn\n",

"dMuq15Rfes7sWIBToswDAACgxXv70HbllxYrrFUbpvIO1sHbTysn361gnwAdO3tKM1e/rjNl582O\n",

"BTgdyjwAAABatJLKCr24f5MkaUHMWLm7uJqcqPkLbhWgDybPUwcvXx06k6tZa5frXEWZ2bEAp0KZ\n",

"BwAAQIv21qFtKig7r86+bXRT9/5mx2kxuvi11YrJ89TG6qO9pzJ1Z/ybKqmsMDsW4DQcWuYXLFig\n",

"8PBwWSwWJSYm2u+fOHGioqOjFRsbq5EjR2rPnj32bSkpKRo2bJgiIiI0cOBAHTx40JERAQAA0IKd\n",

"ryzXS/sTJEkPxYxnKt/IIgI66P1Jc+Tv4amdeWmau/5tlVVVmh0LcAoOLfPTp0/Xli1b1Llz51r3\n",

"f/jhh9q3b58SExO1cOFCzZ49275t/vz5uueee3TkyBH94Q9/qLUNAAAAaEjLk7fpdPl5dfFrq192\n",

"izU7TovUNzBYb8fNkY+bhzZnp+q+je+r0lZtdiygyXNomR81apRCQkJ+dH9AQID930VFRbJYLJKk\n",

"kydPavfu3Zo1a5Yk6aabblJGRoZSU1Mv+frl5eU6e/ZsrVt1Nd/4AAAA+HnnKsr08oGaqfyDMePk\n",

"xlTeNAPah+nNuNmyurppbUayFmxaqWqbzexYQJNm2jHzd9xxh0JDQ/WnP/1J77zzjiQpIyNDnTp1\n",

"kptbzaVALBaLwsLClJ6efsnXePrpp+Xv71/rtnPnzkb7GgAAAOC8lid/o8LyEnX1a6tpXWPMjtPi\n",

"De3YVcvG3S53F1f9K22fHtn6sWwGhR64HNPK/Ntvv62MjAw9+eST+sMf/nBFr/HYY4+pqKio1m3Q\n",

"oEENnBQAAADNzdmKMr1yYLMk6bexE5jKNxFjQ3rqxTEz5Wpx0Uep3+mP27+QYRhmxwKaJNPPZn/n\n",

"nXdqw4YNKigoUGhoqHJyclRVVSVJMgxD6enpCgsLu+RzrVar/Pz8at1cXflBDAAAgJ/2RtJWFVWU\n",

"qod/e93QJdrsOLjItZ376tmRv5JFFr19aLue3P1vCj1wCY1e5gsLC5WdnW3/+LPPPlNgYKDatGmj\n",

"9u3bq3///nr33XclSZ988olCQkLUvXv3xo4JAACAZqqovFSvHayZyj8UO16uLqbPt/ADv+wWq38M\n",

"/6Uk6ZUDCVqSuM7kREDT4+bIF58/f76++uor5ebmatKkSfL19dW6det08803q7S0VC4uLmrXrp2+\n",

"/PJL+0nwXnnlFc2ePVtPPfWU/Pz8tHz5ckdGBAAAQAuzLGmLiirK1DOgg64PjzI7Di7j1ohBKq2q\n",

"1OM7/qXFifHydvPQvVGjzI4FNBkOLfOvvPLKJe//qZPU9ezZU9u2bXNUJAAAALRgheUlWnZwiyTp\n",

"t0zlm7y5kcNVWlWhv3+7Wk/u/lpebu66s/dQs2MBTQI/vQAAANBivHZwi85VlqtX646aEt7X7Dio\n",

"gweix2pB9FhJ0n9v/1wfpuw2ORHQNFDmAQAA0CKcKS/R60lbJdVM5V0s/CrsLH7Xf6LmRg6XJD2y\n",

"9RN9cWyvyYkA8/ETDAAAAC3Cqwc2q7iyXJFtOunazn3MjoN6sFgs+vOg63VrxCDZDEMLElZqbXqS\n",

"2bEAU1HmAQAA0OydLjuvNy5M5RfGTmAq74QsFoueHjpNv+waqyrDpvkb3tPm7BSzYwGm4acYAAAA\n",

"mr2XDyTofFWF+rYJ0qSwSLPj4Aq5urhoycibdW3nPqqwVWvOure1My/N7FiAKSjzAAAAaNYKyor1\n",

"ZnLN1ZIe7jfBfklkOCc3F1e9MHqmxgb3VGlVpe5Yu1yJ+RlmxwIaHWUeAAAAzdpL+xNUUlWhmLYh\n",

"mhDa2+w4aAAerm56ddwsDevYVcWV5bptzRtKOp1jdiygUVHmAQAA0Gzll57TW4dqpvILY5nKNyde\n",

"bu5aPuFODWgXpqKKUt26+nWlFp40OxbQaCjzAAAAaLZe2r9JpVWVim0bqnEhPc2Ogwbm427V23F3\n",

"qW+bIJ0qK9Ytq5cp/dxps2MBjYIyDwAAgGbpZMk5vX1ohySOlW/O/K1een/SXEUEtFduyVnNWPWa\n",

"ss8XmR0LcDjKPAAAAJqlF/dvVFl1pfq3C9OY4Aiz48CB2nj6aMWkeQr3DVRG8Rndsuo15ZeeMzsW\n",

"4FCUeQAAADQ7uSVn9c5hpvItSQdvP62cfLeCfQJ07OwpzVz9us6Ul5gdC3AYyjwAAACanRf2bVR5\n",

"dZUGtu+sUUE9zI6DRhLcKkAfTJ6nDl6+OnQmV7PWvKFzFWVmxwIcgjIPAACAZiXnfJHeP7JTkvRw\n",

"vzim8i1MF7+2WjF5ntpYfbT3VKbujH9TJZUVZscCGhxlHgAAAM3K0gtT+cEdwjW8Uzez48AEEQEd\n",

"9P6kOfLz8NTOvDTNXf+2yqoqzY4FNCjKPAAAAJqN7OJCrWAqD0l9A4P1Ttxd8nbz0ObsVN238X1V\n",

"2qrNjgU0GMo8AAAAmo1/7tugClu1hnbsqmFM5Vu8Ae07680Jd8rq6qa1GclasGmlqm02s2MBDYIy\n",

"DwAAgGYhs/iMPkjZLanmDPaAJA3r1E3Lxt0udxdX/Sttn3639RPZDAo9nB9lHgAAAM3C83s3qNJW\n",

"reGdumlIx65mx0ETMjakp14cM1OuFhd9mPqt/rT9CxmGYXYs4KpQ5gEAAOD00s+d1of2qXycyWnQ\n",

"FF3bua+eHfkrWWTRW4e262+7/02hh1OjzAMAAMDpPb93vaoMm0YF9dCgDuFmx0ET9ctusfrH8F9K\n",

"kl4+kKAlietMTgRcOco8AAAAnFra2QJ9lPqdJI6Vx8+7NWKQ/jzoeknS4sR4vbw/weREwJWhzAMA\n",

"AMCpPb93vaoNm8YER2hA+85mx4ETmNdnhP7Qf5Ik6cndX+ut5G0mJwLqjzIPAAAAp3X87Cl9cnSP\n",

"JI6VR/38JmasfhM9VpL039s/10cp35qcCKgfyjwAAACc1nOJNVP5cSE91a9dqNlx4GR+33+i5kYO\n",

"lyQ9vPVj/ev4PpMTAXVHmQcAAIBTOlqUr0+P1UzlF8ZyrDzqz2Kx6M+DrtetEYNkMwz9ZtMHWpue\n",

"ZHYsoE4o8wAAAHBKzyauk80wFBfaW7FM5XGFLBaLnh46Tb/sGqsqw6b5G97T5uwUs2MBP4syDwAA\n",

"AKeTUnhSnx/fK4mpPK6eq4uLloy8WZPD+qjCVq05697Wzrw0s2MBP4kyDwAAAKfz/VR+UlikotoG\n",

"mx0HzYCbi6teGDNTY4IjVFpVqTvWLldifobZsYDLoswDAADAqRw+k6cvLpyojKk8GpLV1U2vjbtd\n",

"Qzt2VXFluW5b84aSTueYHQu4JMo8AAAAnMqzietkyNC1nfuoT2CQ2XHQzHi5uWv5hDvVv12YiipK\n",

"devq13W0KN/sWMCPUOYBAADgNJJP5+rLtP2SpN8ylYeDtHK36p24u9S3TZBOlRVrxqrXlH7utNmx\n",

"gFoo8wAAAHAaSxLjZcjQdeFRimzTyew4aMb8rV56f9JcRQS0V27JWd2yapmyzxeZHQuwo8wDAADA\n",

"KSSdztbXJw7IIot+Gzve7DhoAdp4+mjFpHnq7Buo9OLTmrl6mfJLz5kdC5BEmQcAAICTWLxnnSTp\n",

"F12i1Kt1R5PToKXo4O2nlZPnKcjHX0eL8jVz9es6U15idiyAMg8AAICm70BBllalH5RFFj3EVB6N\n",

"LKRVa62cfLfae/nq0JlczVrzhs5VlJkdCy0cZR4AAABN3uI98ZKkqV1jFBHQweQ0aIm6+LXViknz\n",

"1Nrqrb2nMnVn/JsqqawwOxZaMMo8AAAAmrR9pzK1JiNZLhaOlYe5erbuoBWT5srPw1M789I0b/07\n",

"KquqNDsWWijKPAAAAJq0xYk1U/lpXWPVzb+dyWnQ0vUNDNY7cXfJ281DCdkpum/j+6q0VZsdCy0Q\n",

"ZR4AAABN1p78DMVnHJKrxUUPxTCVR9MwoH1nvTnhTlld3bQ2I1kPJqxUtc1mdiy0MJR5AAAANFnf\n",

"Hyt/Y7dYdfVva3Ia4D+Gdeqm18bdLncXV31xfJ9+t/UT2QwKPRoPZR4AAABN0rcn07Uh67BcLS56\n",

"kKk8mqBxIT31wuiZcrW46MPUb/Wn7V/IMAyzY6GFoMwDAACgSVq8Z60kaXr3fgr3CzQ5DXBpU8L7\n",

"asnIm2WRRW8d2q6/7f43hR6NgjIPAACAJmd33gltyk6Rm8VFC2LGmR0H+Ek3duunvw/7pSTp5QMJ\n",

"enbvOpMToSWgzAMAAKDJeSaxZip/c48B6uzLVB5N3209B+nPg66XJD2zJ16vHEgwORGaO8o8AAAA\n",

"mpQduce1OTu1ZiofPdbsOECdzeszQn/oP0mS9NddX+vtQ9tNToTmjDIPAACAJuWZC8fK3xIxUKG+\n",

"bUxOA9TPb2LG6jcX/gj1X9s+00cp35qcCM0VZR4AAABNxrbcY/om95jcXVzthQhwNr/vP1FzI4dL\n",

"kh7e+rH+dXyfyYnQHFHmAQAA0CQYhqFF39VM5WdGDFRwqwBzAwFXyGKx6M+DrtfMiIGyGYZ+s+kD\n",

"rU1PMjsWmhnKPAAAAJqEb3KOakfecXm4uOoBpvJwchaLRX8f+ktN6xqrKsOm+Rve0+bsFLNjoRmh\n",

"zAMAAMB0hmHomcR4SdKtPQcpyMff5ETA1XN1cdGzI2/W5LA+qrBVa866t7UzL83sWGgmKPMAAAAw\n",

"3ZacVO3MS5PV1Y2pPJoVNxdXvTBmpsYER6i0qlJ3rF2uvacyzY6FZsChZX7BggUKDw+XxWJRYmKi\n",

"JKmsrEzTpk1TRESEYmJiFBcXp9TUVPtzdu7cqSFDhqhfv37q3bu3/t//+3+OjAgAAACTGYahZ/bU\n",

"TOVvixikjt5+JicCGpbV1U2vjbtdQzt2VXFluW5b84aST+eaHQtOzqFlfvr06dqyZYs6d+5c6/57\n",

"7rlHhw8f1t69ezV16lTNmzev1rb/+q//0p49e7R161YtWrRISUmcLAIAAKC52pSdot0nT8jq6qZf\n",

"R48xOw7gEF5u7lo+4U71bxemwvISzVy9TEeL8s2OBSfm0DI/atQohYSE1LrP09NTU6ZMkcVikSQN\n",

"GTJEaWlp9u0Wi0WFhYWSpPPnz8vDw0Nt2lz6+qLl5eU6e/ZsrVt1dbVDvhYAAAA0vJqpfM0Z7O/o\n",

"NUQdmMqjGWvlbtU7cXepT5tOOlVWrBmrXlP6udNmx4KTMv2Y+eeee05Tp061f7x8+XL96U9/UlhY\n",

"mCIiIvTUU0+pY8eOl3zu008/LX9//1q3nTt3NlZ0AAAAXKUNWUe0Jz9Dnq7uuj9qtNlxAIfzt3rp\n",

"/UlzFRHQXrklZ3XLqmXKPl9kdiw4IVPL/FNPPaXU1FQ9/fTT9vv+/ve/6+mnn1Z6eroOHjyo//7v\n",

"/77sMvvHHntMRUVFtW6DBg1qrPgAAAC4ChdP5e/sNUTtvHxNTgQ0jkDPVloxaZ46+wYqvfi0Zq5e\n",

"pvzSc2bHgpMxrcwvWrRIn376qf7973/L29tbknTq1Cn93//9n2699VZJUteuXTVkyBBt3br1kq9h\n",

"tVrl5+dX6+bq6tpoXwMAAACu3LrMQ9p7KlNebu66j6k8WpgO3n5aOXmegnz8dbQoX7eufl1nykvM\n",

"jgUnYkqZX7x4sVasWKG1a9cqICDAfn/r1q3l4+Oj9evXS6op9zt27FDfvn3NiAkAAAAHufgM9rN7\n",

"DVNbr1YmJwIaX0ir1lo5+W619/JV8plczVrzhs5VlJkdC07CoWV+/vz5CgkJUWZmpiZNmqTu3bsr\n",

"MzNTDz/8sAoLCzV27FjFxsZq8ODBkiRXV1d9+OGH+t3vfqeYmBiNGjVKDz30kIYOHerImAAAAGhk\n",

"a9KTtL8gS95uHrovapTZcQDTdPFrqxWT5qm11Vt7T2VqdvybKqmsMDsWnIDFMAzD7BANaeHChVq8\n",

"eLHZMQAAAHAZhmFo8hfP6+DpHD0QPUaPDphsdiTAdPtPZWnG6td0tqJMo4J66I3xd8jTzd3sWGjC\n",

"TD+bPQAAAFqWVekHdfB0jlq5WzW/z0iz4wBNQlTbYL0Td5e83TyUkJ2i+za+r0obl93G5VHmAQAA\n",

"0Ghshk2LLxwrP6f3MLX29DE5EdB0DGjfWcsn3Cmrq5vWZiTrwYSVqrbZzI6FJooyDwAAgEbz9YmD\n",

"Sj6TK193q+7uy1Qe+KHhnbrptXG3y93FVV8c36ffbf1ENoNCjx+jzAMAAKBR2AybllyYys/tM0Kt\n",

"rd4mJwKapnEhPfXC6Jlytbjow9Rv9aft/1IzO9UZGgBlHgAAAI3iq7QDOlyYJz8PT90dOcLsOECT\n",

"NiW8r5aMvFkWWfTWoW16avcqCj1qocwDAADA4apt/zlWfl7kCPlbvUxOBDR9N3brp78P+6Uk6aUD\n",

"m/Ts3nUmJ0JTQpkHAACAw/0rbZ9Sik7K38NT8/owlQfq6raeg/TnQddLkp7ZE69XDiSYnAhNBWUe\n",

"AAAADlVts+nZxJqJ4j19RsrPw9PkRIBzmddnhH7ff6Ik6a+7vtbbh7abnAhNAWUeAAAADvX58b1K\n",

"LcpXgNVbcyKHmx0HcEoLYsbpgegxkqT/2vaZPkr51txAMB1lHgAAAA5TZavWkgtT+Xv7jpQvU3ng\n",

"iv2h/yTN6T1MkvTw1o/1r+P7TE4EM1HmAQAA4DCfHUvU8bOn1NrqrdkXSgiAK2OxWPTE4F9oZsRA\n",

"2QxDv9n0geIzks2OBZNQ5gEAAOAQNVP59ZKke/uOUit3q8mJAOdnsVj096G/1LSusaoybJq/4T1t\n",

"zk4xOxZMQJkHAACAQ3xydI9OnCtQG6uPZvceanYcoNlwdXHRsyNv1uSwPiqvrtKcdW9rZ16a2bHQ\n",

"yCjzAAAAaHCVtmo9d2Eqf3/UaPkwlQcalJuLq14YM1NjgiNUWlWpO9Yu195TmWbHQiOizAMAAKDB\n",

"fZz6ndKLT6utZyvd0WuI2XGAZsnq6qbXxs3SkI5dVFxZrtvWvKHk07lmx0IjocwDAACgQVVUV+n5\n",

"vf+Zynu7e5icCGi+vNw89OaE2erfLkyF5SWauXqZjhblmx0LjYAyDwAAgAb1Yeq3yig+o/Zevrq9\n",

"12Cz4wDNXit3q96Ju0t92nTSqbJizVj1mtLPnTY7FhyMMg8AAIAGU1FdpX/u3SCpZirv5cZUHmgM\n",

"/lYvvT9priIC2iu35KxuWbVMOeeLzI4FB6LMAwAAoMGsTNmtrPOF6uDlq9t6MpUHGlOgZyutmDRP\n",

"nX0DlV58WjNXL9Op0mKzY8FBKPMAAABoEOXVVXr+wlT+19Fj5OXmbnIioOXp4O2nlZPnKcjHX6lF\n",

"+Zq5epnOlJeYHQsOQJkHAABAg1hxZJdySorU0dtPt0YMMjsO0GKFtGqtDybdrfZevko+k6tZa97Q\n",

"uYoys2OhgVHmAQAAcNXKqir1z301U/nfRI+VJ1N5wFRd/dtqxaR5am311t5TmZod/6ZKKivMjoUG\n",

"RJkHAADAVXvvyE7llZxVkI+/bokYaHYcAJJ6tu6g9yfOlZ+Hp3bkpWne+ndUVlVpdiw0EMo8AAAA\n",

"rkppVaVe2LdRkrQgepysrm7mBgJgF9U2WO/E3SVvNw8lZKfo/o3vq9JWbXYsNADKPAAAAK7Ke4d3\n",

"6GTpOYW0CtCvegwwOw6AHxjQvrOWT7hTVlc3rclI1oMJK1Vts5kdC1eJMg8AAIArVlpVoRf2b5Qk\n",

"/SZ6nDyYygNN0vBO3fTq2Flyd3HVF8f36ffffCKbQaF3ZpR5AAAAXLG3D21XfmmxQlu1ZioPNHHj\n",

"Q3tp6ehb5GKxaGXKt/rT9n/JMAyzY+EKUeYBAABwRUoqK/Ti/k2SpAdjxsndxdXkRAB+znXhUVoy\n",

"8leyyKK3Dm3TU7tXUeidFGUeAAAAV+StQ9tUUHZenX3b6Kbu/c2OA6COburWT08PmyZJeunAJj27\n",

"d525gXBFKPMAAACot/OV5Xppf4IkpvKAM5rVc7D+POh6SdIze+L1yoEEkxOhvijzAAAAqLflydt0\n",

"uvy8wn0DdWO3fmbHAXAF5vUZod/3nyhJ+uuur/X2oe0mJ0J9UOYBAABQL8WV5Xr5whTvodjxcmMq\n",

"DzitBTHj9ED0GEnSf237TB+nfmtuINQZZR4AAAD1sjzpGxWWl6irX1tN6xpjdhwAV+kP/SdpTu9h\n",

"kqSFWz7Wl8f3mZwIdUGZBwAAQJ2drShjKg80MxaLRX8efL1u6XGNbIahBzZ9oPiMZLNj4WdQ5gEA\n",

"AFBnbyRtVVFFqbr7t9PULkzlgebCxeKifwy7UdO6xqrKsGn+hve0OTvF7Fj4CZR5AAAA1ElReale\n",

"O7hZkvTb2AlydeFXSaA5cXVx0ZKRN2tSWKTKq6s0Z93b2pmXZnYsXAY/gQEAAFAny5K2qKiiTBEB\n",

"7XV9eJTZcQA4gLuLq14cc6vGBEeotKpSd6xdrr2nMs2OhUugzAMAAOBnFZaXaNnBLZKkhUzlgWbN\n",

"6uqm18bN0pCOXVRcWa7b1ryh5NO5ZsfCD/BTGAAAAD/rtYNbdK6yXL1ad9SU8L5mxwHgYF5uHnpz\n",

"wmz1axeqwvIS3bpmmY4V5ZsdCxehzAMAAOAnnSkv0etJWyVJv40dLxcLv0ICLUErd6veibtLfdp0\n",

"Un5psWasWqaMc6fNjoULrugncUVFRUPnAAAAQBP16oHNKq4sV2SbTrq2cx+z4wBoRAFWb70/aa56\n",

"+LdXTkmRZqxappzzRWbHgupR5jdu3KhbbrlF7dq1k6enpzw8PNS/f3899dRTOn2av84AAAA0R6fL\n",

"zuuNC1P5hbETmMoDLVCgZyutmDxPnX0DlV58WjNXL9Op0mKzY7V4dfppPGXKFD3//PO68cYb9d13\n",

"36m8vFwFBQV6+eWXVVVVpXHjxmnVqlWOzgoAAIBG9sqBzTpfVaG+bYI0KSzS7DgATNLR208rJ89T\n",

"kI+/UovyNXP1Mp0pLzE7VotmMQzD+LkH7d+/X1FRl7/8SGVlpY4fP66IiIgGDXclFi5cqMWLF5sd\n",

"AwAAwOkVlBVr6Ef/TyVVFXpj/B2aSJkHWrxjRac0/d+v6GTpOcW2DdWKSXPl6+FpdqwWqU6T+UsV\n",

"ecMwdO7cOUmSu7t7kyjyAAAAaDgv7U9QSVWFogODFRfa2+w4AJqArv5ttWLSPLW2eivxVIZmx7+p\n",

"0irOqWaGeh30NHfuXBUWFqqiokKxsbHq0KGDXnzxRUdlAwAAgElOlRbrrUPbJEkP94uTxWIxORGA\n",

"pqJn6w56f+Jc+bpbtSMvTfPWvaPy6iqzY7U49Srz3377rQICArRq1Sr169dPubm5evnllx2VDQAA\n",

"ACZ5af8mlVZVKrZtqMaF9DQ7DoAmJqptsN6JmyNvNw9tyk7RfRveU6Wt2uxYLUq9yvz3h9dv3rxZ\n",

"119/vfz8/OTq6uqQYAAAADDHyZJzeuvQdknSw/0mMJUHcEnXdOis5ePvkNXVTWsykvVgwkpV22xm\n",

"x2ox6lXmO3bsqPvuu08fffSRJkyYoMrKSlVX89cXAACA5uTF/RtVVl2p/u3CNCaY8yIBuLzhQd31\n",

"6thZcndx1RfH9+n333wim0Ghbwz1KvPvvfeeevbsqQ8++EABAQHKysrSwoULHZUNAAAAjSy35Kze\n",

"ObxDElN5AHUzPrSXlo6+RS4Wi1amfKs/bf+X6nDRNFylepX5tm3b6qGHHtKQIUMkSeHh4Zo9e7Yj\n",

"cgEAAMAEL+zbqPLqKl3TvrNGBfUwOw4AJ3FdeJSWjPyVLLLorUPb9NTuVRR6B3Ory4O6dOnyk3+V\n",

"PXbsWIMFAgAAgDlyzhfp/SM7JUmPcAZ7APV0U7d+Kq2q0KPf/J9eOrBJPu4eeih2vNmxmq06lfkv\n",

"v/xSkvTBBx8oLS1N8+fPlyS99tpr6ty582Wft2DBAn3xxRc6ceKE9uzZo9jYWJWVlemWW25RUlKS\n",

"vLy81L59e7300kvq3r27pJqT7D3xxBN6//33ZbVa1bZtW23YsOFqv04AAAD8jKUXpvKDO4RreKdu\n",

"ZscB4IRm9RyssqpK/Xnnl1q0Z6283Tx0T9+RZsdqlupU5vv06SNJWrVqlXbt2mW/f/jw4Ro0aJD+\n",

"8pe/XPJ506dP1+9//3uNGDGi1v333HOPrr32WlksFi1dulTz5s3Txo0bJUnPP/+89u3bpwMHDsjD\n",

"w0O5ublX8nUBAACgHrKLC7XiwlR+IVN5AFdhXp8ROl9Zrv/ds1Z/2fWVvNzcdXuvIWbHanbqVOa/\n",

"V1RUpPPnz8vHx0eSdP78eRUVFV328aNGjfrRfZ6enpoyZYr94yFDhmjRokX2j//3f/9X69evl4eH\n",

"h6SaM+hfTnl5ucrLy2vdx9n1AQAA6u+f+zaowlatoR27MpUHcNUWxIxTSVWlXti/UY9t+0xebu6a\n",

"3n2A2bGalXqdAO/WW2/VkCFD9Ne//lV//etfNWzYMM2aNeuqAjz33HOaOnWqJOns2bPKy8vT559/\n",

"rsGDB2vw4MFauXLlZZ/79NNPy9/fv9Zt586dV5UHAACgpcksPqMPUnZLqjmDPQBcLYvFokcHTNKc\n",

"3sMkSQu3fKwvj+8zOVXzUq/J/J///GcNHDhQ69evlyT94x//0LXXXnvFn/ypp55Samqq1q1bJ0mq\n",

"qqpSVVWVSktLtWPHDqWlpWnYsGHq1auXYmJifvT8xx577EeXxvvTn/50xXkAAABaon/u3aBKW7WG\n",

"d+qmIR27mh0HQDNhsVj058HXq6SqQh+k7NYDmz6Qp5u7JoT2Njtas1CvMi9J1113na677rqr/sSL\n",

"Fi3Sp59+qvj4eHl7e0uS2rRpo1atWtmn/eHh4Ro+fLh27dp1yTJvtVpltVpr3efq6nrV2QAAAFqK\n",

"9HOntdI+lY8zOQ2A5sbF4qJ/DLtRZdVV+uxYouZveE9vTZitEUHdzY7m9Oq1zD4tLU333XefJk6c\n",

"qHHjxtlv9bV48WKtWLFCa9euVUBAQK1tM2fO1KpVqyRJp0+f1s6dOxUdHV3vzwEAAICf9/ze9aoy\n",

"bBoV1EODOoSbHQdAM+Tq4qIlI2/WpLBIlVdX6a51b2lXXprZsZyexTAMo64PHjRokMaPH6+hQ4fW\n",

"moBfblI/f/58ffXVV8rNzVVgYKB8fX21ceNGhYaGqmvXrvL19ZVUM2HfsWOHJKmgoEB33XWX/dr1\n",

"999/v+6///46f0ELFy7U4sWL6/x4AACAlirtbIFGf/qMqg2bPr/uPg1of/lLDgPA1SqvrtKcdW9r\n",

"U9YR+bpb9cHkuxXTNsTsWE6rXmU+Ojpa+/Y17ZMWUOYBAADqZuHmj/Rh6rcaHRyh9ybOMTsOgBag\n",

"tKpCs9Ys14684wqweuujyfeod5vLX8EMl1evZfZ9+/ZVenq6o7IAAACgkRw/e0qfHN0jiTPYA2g8\n",

"Xm4eeitutvq1C1VheYluXbNMx4ryzY7llOp1Arz8/HzFxMRo6NCh8vT0tN//6aefNngwAAAAOM5z\n",

"ietVbdg0LqSn+rcLMzsOgBaklbtV78TdpRmrXtPB0zmasWqZPp0yX6G+bcyO5lTqVeZnzZp11deV\n",

"BwAAgLmOFeXr02M1U/mFsUzlATS+AKu33p80V9O/flUpRSc1Y9UyfTJlvjr5+JsdzWnUq8zfeeed\n",

"jsoBAACARrIkcZ1shqEJob0U2y7U7DgAWqhAz1ZaMXmebvr6FZ04V6CZq5fp42vnq61XK7OjOYV6\n",

"lfk5cy59YpQ33nijQcIAAADAsVILT+rz43slSQ/Hcl15AObq6O2nlZPn6cavX1ZqUb5uXfO6Vk6+\n",

"W62t3mZHa/LqdQK8AQMG2G99+vTRoUOH5O3N/2QAAABnsWRvzVR+UlikotoGmx0HABTSqrU+mDRP\n",

"7bxaKel0jm5fs1znKsrMjtXk1Wsy/+tf/7rWx/fdd59uuOGGBg0EAAAAxzh8Jk9fHKu5zDDHygNo\n",

"Srr6t9OKSfN0879fVeKpDM2Of1PvTpwjLzcPs6M1WfWazP+Qp6enMjMzGyoLAAAAHOjZxHUyZOja\n",

"zn3UJzDI7DgAUEuv1h313sQ58nW3akdemuate0fl1VVmx2qy6jWZX7hwof3f1dXV2r17t/r27dvg\n",

"oQAAANCwDp3J1Zdp+yVJv2UqD6CJim4bonfi5ujWNa9rU3aK7tvwnl4ZN0vuLq5mR2ty6jWZ9/f3\n",

"t9/at2+vBQsWaMWKFY7KBgAAgAay5MJU/rrwKEW26WR2HAC4rGs6dNby8XfI6uqmNRnJejBhpapt\n",

"NrNjNTn1msw//vjjjsoBAAAAB0k6na2v0vbLIot+Gzve7DgA8LOGB3XXq2Nnad76d/TF8X3ycnPX\n",

"/w6/SS6WqzpSvFmp1/+Jc+fO6de//rUiIiIUERGhBx54QOfOnXNUNgAAADSAxXvWSZJ+0SVKvVp3\n",

"NDkNANTN+NBeWjr6FrlYLFqZ8q3+Z8e/ZBiG2bGajHqV+fvvv19VVVX68MMP9dFHH8lms+n+++93\n",

"VDYAAABcpQMFWVqVflAWWfQQU3kATua68CgtHnGzLLLozeRtevrbVRT6C+q1zH7fvn3au3ev/eMX\n",

"X3xRMTExDR4KAAAADWPxnnhJ0g1doxUR0MHkNABQf9O791dZVaUe3fZ/enH/Jnm7efDHSdVzMl9d\n",

"XV1rWX1xcbGqq6sbPBQAAACu3r5TmVqTkSwXi0W/jeEXXwDOa1avwXp80HWSpEV71urVA5tNTmS+\n",

"ek3m77zzTg0ZMkQzZsyQJH344Ye66667HBIMAAAAV2dxYs1UflrXWHUPaG9yGgC4Onf3GamSygr9\n",

"7561+suur+Tl5q7bew0xO5Zp6lXmf/e73ykqKkrx8TVvDIsWLdLkyZMdEgwAAABXbk9+huIzDsnF\n",

"YtFDMePMjgMADWJBzDiVVFXqhf0b9di2z+Tl5q7p3QeYHcsUdSrzRUVFevLJJ3X48GENGDBAf/vb\n",

"32S1Wh2dDQAAAFfo+2Plb+rWT13925mcBgAahsVi0aMDJqmkqkLLk7/Rwi0fy9PNQ9eHR5kdrdHV\n",

"6Zj5e++9V8eOHdO1116rb775Rv/1X//l6FwAAAC4Qt+eTNeGrMNytbjoQY6VB9DMWCwWPTH4es3o\n",

"cY1shqEHNq7QuoxDZsdqdHWazO/bt08HDhyQxWLR7NmzNWLECEfnAgAAwBX6/lj56d37Kdwv0OQ0\n",

"ANDwXCwu+n/DblRZdaU+P7ZX92x4V29NmK0RQd3NjtZo6jSZt1qtslgskiQvLy+HBgIAAMCV2513\n",

"QpuyjsjN4qIFHCsPoBlzdXHRsyN/pUlhkSqvrtJd697Srrw0s2M1mjpN5jMzM7Vw4UL7xxkZGbU+\n",

"Xrx4ccMnAwAAQL09k7hWknRzjwHq7MtUHkDz5u7iqhfH3Ko5697WpqwjumPtcn0w+W7FtA0xO5rD\n",

"1Wky/+tf/1r+/v722w8/BgAAgPl25B7X5uzUmql89Fiz4wBAo7C6umnZuFka3KGLzlWW67Y1byj5\n",

"dK7ZsRyuTpP5xx9/3NE5AAAAcJWe2VMzlZ/R4xqF+rYxOQ0ANB4vNw+9FTdbM1cv0578DN26Zpk+\n",

"uXZ+s76aR50m8zt27PjJ7aWlpUpKSmqQQAAAAKi/bbnH9E3uMbm7uHKsPIAWqZW7Ve/E3aXINp2U\n",

"X1qsGauWKePcabNjOUydyvwzzzyjuLg4LV++XElJSSooKFBWVpbWr1+v3//+9xo6dKjy8vIcnRUA\n",

"AACX8f1UfmbEQAW3CjA3DACYJMDqrfcnzlV3/3bKKSnSLauXKed8kdmxHKJOZf7DDz/UU089pa1b\n",

"t+qGG25QcHCwoqOj9de//lVhYWHaunWrxo7luCwAAAAzbM05qu25x+Xh4qoHOFYeQAvX1quVVkya\n",

"p86+bXTi3GnNXL1Mp0qLzY7V4Op0zLwkDRw4UAMHDnRkFgAAANSTYRgXTeUHKciHkxMDQCcff30w\n",

"aZ5u+vcrSi3K161rXtfKyXertdXb7GgNpk6T+e/df//9dboPAAAAjWNLTqp25qXJ6uqmB6LHmB0H\n",

"AJqMUN82+mDSPLXzaqWk0zl6YOMKsyM1qHqV+e3bt//ovm+++abBwgAAAKDuaqby8ZKk2yIGqRNT\n",

"eQCopat/O62YNE/d/Nvp0QGTzY7ToOq0zH7lypX64IMPdPz4cd144432+4uKitSqVSuHhQMAAMDl\n",

"bcpO0e6TJ2R1ddOvmcoDwCX1at1R66f9Vq4u9ZplN3l1KvO9evXS1KlT9d1332nq1Kn2+/38/DR+\n",

"/HiHhQMAAMClXXys/B29hqiDt5/JiQCg6WpuRV6qY5mPiYlRTEyMrrvuOrVr187RmQAAAPAzNmQd\n",

"0Z78DHm6uuv+qNFmxwEANLI6n81ektzd3fWPf/xDR48eVVVVlf3+N954o8GDAQAA4NIunsrf2WuI\n",

"2nn5mpwIANDY6lXmp0+frnbt2mno0KFydXV1VCYAAAD8hHWZh7T3VKa83Nx1H1N5AGiR6lXmc3Jy\n",

"FB8f76gsAAAA+BmGYWjxhTPYz+41TG29OBkxALRE9ToLQLdu3VRYWOigKAAAAPg5azOSta8gS95u\n",

"HrovapTZcQAAJqnTZH7hwoWSJG9vb/Xv31+TJ0+Wp6enffvixYsdkw4AAAB2Fx8rf1fvYWrj6WNy\n",

"IgCAWepU5v39/e3/7d27t0MDAQAA4NJWpR/UwdM58nHz0L19R5odBwBgojqV+ccff9zROQAAAPAT\n",

"bIbNfqz83Mjhas1UHgBatHqdAO8vf/nLj+4LCAjQ0KFDNXDgwAYLBQAAgNr+feKgks/kytfdqruZ\n",

"ygNAi1evE+AlJyfrpZdeUkZGhjIzM/Xyyy9r48aNuu222/T88887KiMAAECLVmsq32eEWlu9TU4E\n",

"ADBbvSbzZ86cUWJiojp06CBJysvL0+23367t27dr5MiRWrBggUNCAgAAtGRfpR3Q4cI8+Xl46u7I\n",

"EWbHAQA0AfWazGdmZtqLvCR16NBB2dnZatOmjdzd3Rs8HAAAQEtXbbNpSWLNVH5e5Aj5W71MTgQA\n",

"aArqVeaDg4P1xBNPKCMjQxkZGfrLX/6ioKAgVVdXy2KxOCojAABAi/WvtH06UnhS/h6emteHqTwA\n",

"oEa9yvxbb72lgwcPKjY2VrGxsTpw4IDefPNNVVZW6u2333ZURgAAgBap2mbTs4nrJEn39BkpPw9P\n",

"kxMBAJqKeh0z37FjR3344YeX3BYVFdUggQAAAFDj8+N7lVqUrwCrt+ZEDjc7DgCgCalTmd+0aZNG\n",

"jx6tL7744pLbb7jhhgYNBQAA0NJV2aq15MJUfn6fkfJlKg8AuEidyvy7776r0aNHa8mSJT/aZrFY\n",

"KPMAAAAN7LNjiTp+9pRaW711V+Qws+MAAJqYOpX51157TZK0YcMGh4YBAABAzVT+2cT1kqR7+45S\n",

"K3eryYkAAE1NvU6AV1VVpWeeeUb333+/JOno0aNav369Q4IBAAC0VJ8e3aO0cwVqY/XR7N5DzY4D\n",

"AGiC6nUCvAceeEDV1dXasmWLJCkwMFAzZszQ7t27HRIOAACgpam8aCp/X9Qo+TCVBwBcQr0m89u3\n",

"b9drr70mT8+aE7AEBASosrLyso9fsGCBwsPDZbFYlJiYKEkqKyvTtGnTFBERoZiYGMXFxSk1NfVH\n",

"z12/fr1cXV317LPP1iciAACAU/s49TulF59WW89WurMXU3kAwKXVq8x/X+K/V11dLZvNdtnHT58+\n",

"XVu2bFHnzp1r3X/PPffo8OHD2rt3r6ZOnap58+bV2l5UVKRHH31UU6ZMqU88AAAAp1ZRXaXn99ZM\n",

"5e+PGi1vdw+TEwEAmqp6lfno6Gi9++67stlsSk1N1b333qsxY8Zc9vGjRo1SSEhIrfs8PT01ZcoU\n",

"WSwWSdKQIUOUlpZW6zEPPPCA/vjHPyowMPAn85SXl+vs2bO1btXV1fX5kgAAAJqMD1O/VUbxGbXz\n",

"aqXbew02Ow4AoAmrU5l//PHHlZCQoCVLlmjz5s3Kzc3V8OHDZbFY9Pe///2qAjz33HOaOnWq/eOP\n",

"P/5YLi4udbrc3dNPPy1/f/9at507d15VHgAAADNUVFfpn3trrhz066gx8nJjKg8AuLw6nQDv5MmT\n",

"uueee5SRkaGhQ4dqwYIFGjdunAYNGiRXV9cr/uRPPfWUUlNTtW7dOklSbm6unnzySW3cuLFOz3/s\n",

"sce0cOHCWvf96U9/uuI8AAAAZlmZsltZ5wvVwctXt/VkKg8A+Gl1KvMvvfSSJCknJ0cbN27Uxo0b\n",

"NXv2bOXk5GjkyJH66quv6v2JFy1apE8//VTx8fHy9vaWJH377bfKyclRbGysJOnUqVP64osvlJ+f\n",

"r7/97W8/eg2r1SqrtfYZXq/mjwsAAABmKK+u0vPfT+Wjx8jLzd3kRACApq5el6br1KmTbrrpJnXq\n",

"1EkdO3bUihUr7Gepr4/FixdrxYoVio+PV0BAgP3+6667Tnl5efaPZ8+erdjYWD300EP1/hwAAADO\n",

"YsWRXcopKVJHbz/dGjHI7DgAACdQpzKfkJCgjRs3asOGDcrKytKQIUM0atQoffXVV+rRo8dlnzd/\n",

"/nx99dVXys3N1aRJk+Tr66uNGzfq4YcfVteuXTV27FhJNRP2HTt2NMxXBAAA4ETKqir1z301U/nf\n",

"RI+VJ1N5AEAd1KnMjxkzRkOGDNH//M//aPLkyXV+8VdeeeWS9xuGUafnv/nmm3X+XAAAAM7o/SM7\n",

"lVdyVkE+/rolYqDZcQAATqJOZ7NPSEjQlClTtGjRInXv3l233nqrXn31VR05csTR+QAAAJqt0qpK\n",

"Ld23UVLNVN7qWq8jIAEALVid3jFGjBihESNG6I9//KMqKiq0Y8cObdiwQTfccIOKi4uVmZnp6JwA\n",

"AADNznuHd+hk6TkF+wRoRo9rzI4DAHAi9frzb3Z2tjZs2KCNGzdq/fr1OnnypEaMGOGobAAAAM1W\n",

"aVWFXti/UZK0IGacPJjKAwDqoU7vGnfffbc2bdqk7OxsDR06VGPHjtW7776rgQMHys2NNx4AAID6\n",

"eufQDuWXFiu0VWv9qscAs+MAAJxMnZp4aGioXn/9dQ0ZMkTu7pxhFQAA4GqUVNaeyru7uJqaBwDg\n",

"fOpU5v/nf/7H0TkAAABajLcObVNB2Xl19m2j6d37mx0HAOCE6nQ2ewAAADSM85Xleml/giTpQaby\n",

"AIArRJkHAABoRMuTt+l0+XmF+wbqxm79zI4DAHBSlHkAAIBGUlxZrpcP1EzlH4odLzem8gCAK0SZ\n",

"BwAAaCTLk75RYXmJuvq11bSuMWbHAQA4Mco8AABAIzhbUcZUHgDQYCjzAAAAjeCNpK0qqihVd/92\n",

"mtqFqTwA4OpQ5gEAABysqLxUrx3cLEn6bewEubrwKxgA4OrwTgIAAOBgrydtVVFFmSIC2uv68Ciz\n",

"4wAAmgHKPAAAgAMVlpcwlQcANDjeTQAAABzotYNbdK6yXD0DOui68L5mxwEANBOUeQAAAAc5U16i\n",

"15O2SpIW9psgFwu/egEAGgbvKAAAAA7y6oHNKq4sV+/WHXVt5z5mxwEANCOUeQAAAAc4XXZeb1yY\n",

"yj/cL46pPACgQfGuAgAA4ACvHNis81UV6tsmSJPCIs2OAwBoZijzAAAADaygrFjLk7+RVHOsvMVi\n",

"MTkRAKC5ocwDAAA0sJf2J6ikqkLRgcGKC+1tdhwAQDNEmQcAAGhAp0qL9dahbZJqjpVnKg8AcATK\n",

"PAAAQAN6af8mlVZVKrZtqMaF9DQ7DgCgmaLMAwAANJCTJef01qHtkjhWHgDgWJR5AACABvLi/o0q\n",

"q65U/3ZhGhscYXYcAEAzRpkHAABoAHklZ/XO4R2SpIeZygMAHIwyDwAA0ABe2LdR5dVVuqZ9Z40K\n",

"6mF2HABAM0eZBwAAuEo554v03pGdkpjKAwAaB2UeAADgKi29MJUf3CFcIzp1NzsOAKAFoMwDAABc\n",

"heziQq24MJVfyHXlAQCNhDIPAABwFf65b4MqbNUa0rGLhnfqZnYcAEALQZkHAAC4QpnFZ/RBym5J\n",

"0sP94kxOAwBoSSjzAAAAV+ifezeo0lat4Z26aWjHrmbHAQC0IJR5AACAK5Bx7rRWMpUHAJiEMg8A\n",

"AHAFntu7XlWGTSODumtQh3Cz4wAAWhjKPAAAQD2dOFegj1K/kyQ9HMtUHgDQ+CjzAAAA9fT83vWq\n",

"NmwaHRyhazp0NjsOAKAFoswDAADUw/Gzp/Rx6h5J0sP9JpicBgDQUlHmAQAA6uG5xJqp/LiQnurf\n",

"LszsOACAFooyDwAAUEfHivL16bGaqfzCWKbyAADzUOYBAADqaEniOtkMQxNCeym2XajZcQAALRhl\n",

"HgAAoA5SC0/q8+N7JXEGewCA+SjzAAAAdbBkb81UflJYpKLaBpsdBwDQwlHmAQAAfsaRwjx9cWyf\n",

"JI6VBwA0DZR5AACAn7FkzzoZMjQ5rI/6BAaZHQcAAMo8AADATzl0Jldfpu2XJC3kuvIAgCaCMg8A\n",

"APATliTWTOWvC49SZJtOZscBAEASZR4AAOCykk5n66u0/bLIot/Gjjc7DgAAdpR5AACAy1i8Z50k\n",

"6RddotSrdUeT0wAA8B+UeQAAgEs4WJCtVekHZZFFDzGVBwA0MZR5AACAS1icGC9JuqFrtCICOpic\n",

"BgCA2hxa5hcsWKDw8HBZLBYlJiZKksrKyjRt2jRFREQoJiZGcXFxSk1NtT/nrrvusm8bPny4du3a\n",

"5ciIAAAAP7LvVKZWpyfJxWLRb2OYygMAmh6Hlvnp06dry5Yt6ty5c63777nnHh0+fFh79+7V1KlT\n",

"NW/ePPu2X/7yl0pKStLevXv12GOP6eabb3ZkRAAAgB/5fio/rWusuge0NzkNAAA/5tAyP2rUKIWE\n",

"hNS6z9PTU1OmTJHFYpEkDRkyRGlpafbtN9xwg9zc3OzbsrKyVFVVdcnXLy8v19mzZ2vdqqurHfPF\n",

"AACAFiExP0PxGYfkYrHooZhxZscBAOCSTD9m/rnnntPUqVMvu23KlCn2cv9DTz/9tPz9/Wvddu7c\n",

"6ci4AACgmXtmT81U/sau/dTVv53JaQAAuDRTy/xTTz2l1NRUPf300z/a9u677+rDDz/Uq6++etnn\n",

"P/bYYyoqKqp1GzRokCMjAwCAZuzbk+nakHVYrhYXPRjLVB4A0HRdeuTdCBYtWqRPP/1U8fHx8vb2\n",

"rrVt5cqVeuKJJ7Ru3Tp16HD5s8darVZZrdZa97m6ujokLwAAaP6+P1Z+evd+6uLX1uQ0AABcnill\n",

"fvHixVqxYoXi4+MVEBBQa9uHH36oP/7xj4qPj1dYWJgZ8QAAQAu0O++ENmUdkZvFRQs4Vh4A0MQ5\n",

"dJn9/PnzFRISoszMTE2aNEndu3dXZmamHn74YRUWFmrs2LGKjY3V4MGD7c+57bbbVFZWpqlTpyo2\n",

"NlaxsbEqKChwZEwAAAA9k7hWkjS9e3919g00OQ0AAD/NoZP5V1555ZL3G4Zx2edUVlY6Kg4AAMAl\n",

"7cxL0+bsVLlZXPQgU3kAgBMw/Wz2AAAAZntmT81UfkaPaxTq28bkNAAA/DzKPAAAaNG25R7T1pyj\n",

"cndx5Vh5AIDToMwDAIAW7fup/MyIgQpuFWBuGAAA6ogyDwAAWqytOUe1Pfe4PFxc9UD0WLPjAABQ\n",

"Z5R5AADQIhmGcdFUfpCCfPxNTgQAQN1R5gEAQIu0JSdVO/PSZHV10wPRY8yOAwBAvVDmAQBAi1Mz\n",

"lY+XJN0WMUidmMoDAJwMZR4AALQ4Cdkp2n3yhKyubvo1U3kAgBOizAMAgBbFMAwtunCs/O09B6uD\n",

"t5/JiQAAqD/KPAAAaFE2ZB3RnvwMebq66/6oMWbHAQDgilDmAQBAi3HxGezv7DVE7b19TU4EAMCV\n",

"ocwDAIAWY13mIe09lSkvN3fdFzXa7DgAAFwxyjwAAGgRDMPQ4gtnsJ/da5jaerUyOREAAFeOMg8A\n",

"AFqEtRnJ2leQJW83D90XNcrsOAAAXBXKPAAAaPYuPlb+rt7D1MbTx+REAABcHco8AABo9lalH9TB\n",

"0znycfPQvX1Hmh0HAICrRpkHAADNms2w2Y+Vnxs5XK2ZygMAmgHKPAAAaNb+feKgks/kytfdqruZ\n",

"ygMAmgnKPAAAaLYunsrPiRyu1lZvkxMBANAwKPMAAKDZ+irtgA4X5snPw1N39xlhdhwAABoMZR4A\n",

"ADRL1TabliTWTOXnRY5QAFN5AEAzQpkHAADN0pdp+3Wk8KT8PTw1j6k8AKCZocwDAIBm5+Kp/N19\n",

"RsrPw9PkRAAANCzKPAAAaHY+P75XqUX58vfw0tzI4WbHAQCgwVHmAQBAs1Jlq9azieskSff2HSVf\n",

"pvIAgGaIMg8AAJqVz44l6tjZU2pt9dZdkcPMjgMAgENQ5gEAQLNRM5VfL6lmKt/K3WpyIgAAHIMy\n",

"DwAAmo1Pj+5R2rkCtbH6aHbvoWbHAQDAYSjzAACgWai0Veu5vTVT+fuiRsmHqTwAoBmjzAMAgGbh\n",

"49TvdOLcabX1bKU7ezGVBwA0b5R5AADg9Cqqq/T8han8/VGj5e3uYXIiAAAcizIPAACc3kep3ymj\n",

"+IzaebXS7b0Gmx0HAACHo8wDAACndvFU/tdRY+TlxlQeAND8UeYBAIBTW5myW1nnC9XBy1e39WQq\n",

"DwBoGSjzAADAaZVXV+n5vRskSb+OHiMvN3eTEwEA0Dgo8wAAwGmtOLJLOSVF6ujtp1sjBpkdBwCA\n",

"RkOZBwAATqmsqlL/3FczlX8geqw8mcoDAFoQyjwAAHBK7x/ZqbySs+rk7a+ZEQPNjgMAQKOizAMA\n",

"AKdTWlWpF/ZtlCQtiBkrq6ubuYEAAGhklHkAAOB03ju8Q3ml5xTsE6AZPa4xOw4AAI2OMg8AAJxK\n",

"aVWFXti/UZK0IGacPJjKAwBaIMo8AABwKu8c2qH80mKFtmqtX/UYYHYcAABMQZkHAABOo6Sy9lTe\n",

"3cXV1DwAAJiFMg8AAJzGW4e2qaDsvDr7ttH07v3NjgMAgGko8wAAwCmcryzXS/sTJEkPMpUHALRw\n",

"lHkAAOAU3kzeptPl5xXuG6gbu/UzOw4AAKaizAMAgCavuLJcLx2omco/FDtObkzlAQAtHGUeAAA0\n",

"ecuTvlFheYm6+rXVtK6xZscBAMB0XJgVQLOSce601mYkK+t8kQa176xhnbrJ18PT7FgArsK5ijK9\n",

"bJ/Kj2cqDwCAKPMAnJzNsGl/QbbWpCdpTXqSks/k2re9IsnV4qL+7UI1KriHRgVFKKZtMEUAcDKv\n",

"J21VUUWpuvu309QuMWbHAQCgSaDMA3A6ZVWV+ib3mNamJ2lNRrLySs7at7lYLBrYPlzd/NtpW+4x\n",

"HT97SrtOntCukyf0zJ54+Xt4anin7hoV1EOjgnsozLeNiV8JgJ9TVF6q1w5uliT9NnaCXF04QhAA\n",

"AIkyD8BJnC47r/WZh7Q6PUmbslJUUlVh3+bt5qExwRGaGNZb40J6qY2nj31b+rnTSshO0ebsVG3J\n",

"TlFRRZm+PnFAX584IEkK9w3U6OAeGhnUQ8M6dZMfS/KBJqVmKl+miID2uj48yuw4AAA0GQ4t8wsW\n",

"LNAXX3yhEydOaM+ePYqNjVVZWZluueUWJSUlycvLS+3bt9dLL72k7t27S5JOnjypO+64Q0ePHpXV\n",

"atWLL76oUaNGOTImgCbqWNEprUlP0tqMJO06eUI2w7Bv6+Dtp4mhvRUXFqlhHbvK0839kq8R5ttG\n",

"s3oO1qyeg1Vts2lvQaYSslKUkJ2i706mK+1cgdIOFeitQ9tZkg80MYXlJVqWtEUSU3kAAH7IoWV+\n",

"+vTp+v3vf68RI0bUuv+ee+7RtddeK4vFoqVLl2revHnauHGjJOnRRx/VkCFDtGrVKu3atUu//OUv\n",

"dfz4cbm7X/oXdQDNR7XNpj35GVp9ocCnFuXX2h7ZppPiQntrUlikogKDZbFY6vX6ri4u6t8uTP3b\n",

"hemh2PE6V1GmbbnHtOlCuf/hknw/D08N79RNo4MiWJIPmOC1g1t0tqJMPQM66LrwvmbHAQCgSXFo\n",

"mb/URN3T01NTpkyxfzxkyBAtWrTI/vGHH36o1NRUSdLAgQMVFBSkTZs2acKECT96rfLycpWXl9e6\n",

"r7q6uqHiA2gEJZUVSshO0dqMJMVnHFJB2Xn7NjeLi4Z26qq40N6aGBapkFatG/Rz+3p4amJYpCaG\n",

"RUqqORN+QnaqErJT7Evy/33ioP594qAkqfOFJfmjWJIPONyZ8hK9nrRVkrSw3wS5WJjKAwBwMdOP\n",

"mX/uuec0depUSVJBQYEqKyvVsWNH+/bw8HClp6df8rlPP/20nnjiiVr3DRkyxHFhATSIvJKzis84\n",

"pLUZSdqcnary6ir7Nj8PT40L6aWJob01JqRnoxbmUN82uq3nIN3Wc5B9Sf7mC1P7b0+m68S5Ar19\n",

"qEBvX7Qkf2RQD40O7qGYtiEsyQca0GsHNqu4sly9W3fUtZ37mB0HAIAmx9Qy/9RTTyk1NVXr1q27\n",

"ouc/9thjWrhwYa37/vSnPzVENAANyDAMHS7M09r0ZK3JSNKe/Ixa20Nbta6ZkIf21qCOXeTeBErx\n",

"xUvyH7xoSX5CdooSslJ07KIl+YsT/7Mk//uz5Hf2DTT7SwCc1umy80zlAQD4GaaV+UWLFunTTz9V\n",

"fHy8vL29JUmBgYFyc3NTbm6ufTqflpamsLCwS76G1WqV1WqtdZ+rq/klAIBUaavWzrw0rU1P0tqM\n",

"ZJ04d7rW9pi2IZoUFqm40Ej1at2h3se/N7afXpKfqqKKUpbkAw3klQObdb6qQn3bBGlyGFN5AAAu\n",

"xZQyv3jxYq1YsULx8fEKCAiote3mm2/Wyy+/rD//+c/atWuXsrKyNHr0aDNiAqincxVl2ph1RKvT\n",

"k7Qh85CKKsrs26yubhrRqbviwnprQmhvdfT2MzHp1fvhkvx9BVlKyDpy2SX5/dqFahRL8oGfVVBW\n",

"rOXJ30iqmco39T/0AQBgFothXHStpwY2f/58ffXVV8rNzVVgYKB8fX21ceNGhYaGqmvXrvL19ZVU\n",

"M2HfsWOHJCkvL0+33367jh8/Lg8PDy1dulRjx46t8+dcuHChFi9e7JCvB8CPZRUXam1GstakJ2lb\n",

"7jFV2v5zEso2Vh9NCO2luLDeGh0UIW93DxOTNp7iynJtyzmqTRctyb+Yn4enhnXsVjO5Z0k+UMuT\n",

"u77WywcSFB0YrK9+8QBlHgCAy3BomTcDZR5wLMMwdKAgW6szkrQ2PUkHT+fU2t7Nv5397PMD2oVx\n",

"XWhJmcVn7Mfab76wJP9inX0DNSqou0YF99DwTt1Zko8W61RpsYZ+/A+VVlXqzQl3akJob7MjAQDQ\n",

"ZJl+NnsATV95dZW+yTlqn8Dnlpy1b3OxWHRN+872At/Nv52JSZumkFatdWvEIN0a8cMl+an69uQJ\n",

"nThXoHcOF+idwzvsS/JHBnXX6KAIxbZjST5ajpf2b1JpVaVi2oZofEgvs+MAANCkUeYBXNKZ8hKt\n",

"yziktRnJ2ph5WOerKuzbvNzcNTooQpPCIjUutKcCPVuZmNS5uLrUlPV+7UL1YOz4WkvyN2en6mhR\n",

"vnafPKHdJ09oSeI6+bpbNbxTd40O7qGRQT0U7seSfDRPJ0vO6a1D2yVJD/eLY3k9AAA/gzIPwO74\n",

"2VP2y8ftyjuhasNm39bBy1dxYZGKC+2t4Z26ydPN3cSkzUcrd2vN/9cLZ8m/1JL8VekHtSr9+7Pk\n",

"t7Ff/m5Yx27yt3qZGR9oMC/u36iy6kr1axeqscERZscBAKDJo8wDLZjNsGlPfobWpNcsn08pOllr\n",

"e+/WHTXxQoGPbhvMtZ4bwQ+X5O8vyFJCdoo2ZaVcWJJ/Wu8c3qF3Du+Qi8Wifm1DNSq4B0vy4dTy\n",

"Ss7qncM1J8J9hKk8AAB1QpkHWpjSqgptzk7VmvQkxWcc0qmyYvs2N4uLhnTsqriw3ooL7a0w3zYm\n",

"JoWri4ti24Uqtl2oFsSMU3FlubbnHtOmrBQlZKfoaFG+vs1P17f56fYl+cM6ddPo4AiNYkk+nMgL\n",

"+zaqvLpK17TvrFFBPcyOAwCAU6DMAy1Afuk5xWcc0tr0JCVkp6qsutK+zdfdqnEhNZePGxMcoQCr\n",

"t4lJ8VNauVs1IbS3/Qzf3y/J35yVqs05qSosL9Hq9CStTk+S9J8l+SODemh4J5bko2nKOV+k947s\n",

"lCQ9zHXlAQCoM8o80AwZhqGUopNak56kNenJ2pOfIUP/uQplSKsAxYVGamJYbw3u0EUervwocEaX\n",

"W5KfkJ2i3XmXX5I/KqiH+rULZUk+moSlF6bygzqEa0Sn7mbHAQDAafAbPNBMVNmqtevkCXuBP3Gu\n",

"oNb2mLYh9svH9W7dkelXM8OSfDij7OJCrbBP5TlWHgCA+qDMA06suLJcGzMPa01GstZlHFJRRal9\n",

"m4eLq4Z36q5JYZEaH9pLnXz8TUyKxvbDJflZxYX/OUv+JZbkh7VqY5/asyQfjWXp/o2qsFVrSMcu\n",

"Gt6pm9lxAABwKpR5wMlkFxdqbUay1mQka1vOUVXYqu3bWlu9NT6klyaGRWp0cA/5uFtNTIqmJLhV\n",

"gGZGDNTMiIGqttl04HS2ErJStCn7iHbnnVB68Wm9e3iH3r2wJD/Wfpb8HoptFyp3luSjgWUWn9GK\n",

"I7sk1UzlAQBA/VDmgSbOMAwdPJ2tNenJWpuRrP0FWbW2d/Frq4lhkZoY2lsD2odxHDR+lquLi2La\n",

"hiimbYh+EzPWviQ/4cKS/NSifH2Xn67v8tP17EVL8r+/vn24byDLoXHV/rl3gypt1RreqZuGduxq\n",

"dhwAAJwOZR5ogiqqq7Qt99iFAp+k7PNF9m0WWXRN+zDFXSjw3fzbUaxwVS63JH9zdooSsi+/JH9k\n",

"UHcN79SNKyCg3jLOndbKlN2SmMoDAHClKPNAE3GmvEQbMg9rbXqyNmQdVnFluX2bl5u7RgX10MSw\n",

"SI0P6aW2Xq1MTIrm7qeW5H97Mp0l+bhqz+1dryrDppFB3TWoQ7jZcQAAcEqUecBEJ84VaG16slan\n",

"J2lnXpqqDZt9W3svX00I7a2JYb01vFN3ebm5m5gULdUPl+SfryzX9tzj2pR15JJL8lu5WzWcJfn4\n",

"CSfOFeij1O8kSQ/HMpUHAOBKUeaBRmQzbEo8lam16clak56kw4V5tbb3DOigiWGRigvrrdi2IXKx\n",

"uJiUFLg0H3erxof20vjQXpJqTsj4/bXtL7UkP7RVa3uxZ0k+JOn5vetVbdg0OjhC13TobHYcAACc\n",

"FmUecLDSqkptyU7RmoxkxWckK7+02L7N1eKiwR3C7QW+sy/X+oZzCWoVoFsiBuqWi5bkb85O0aas\n",

"FO0+eUIZxWf03pGdeu/ITvuS/JFB3TU6OEL9WJLf4hw/e0ofp+6RJD3cb4LJaQAAcG6UecABTpUW\n",

"Kz6j5uzzm7JSVFZdad/Wyt2qscE9NTEsUmNDIphUotm4eEn+A9G1l+Rvzk5VStFJ+5L85/aur7Uk\n",

"f2RQD3XxY0l+c/dcYs1UfmxwT/VvF2Z2HAAAnBplHmgAhmEotShfa9KTtDYjWd+eTJchw749yMf/\n",

"wuXjIjWkYxd5uPKth+bvp5bkb85O1RmW5Lcox4ry9ekxpvIAADQUGgVwhaps1dp98kTN8e8ZyTp+\n",

"9lSt7VGBwZoY1lsTQyMV2aYTE0e0eBcvybcZNh0oyFbCTyzJj2kbolFBPViS30w8u3e9bIahCaG9\n",

"FNsu1Ow4AAA4Pco8UA/FleXalHVEa9OTtS7zkM6Ul9i3ebi4alinbpoYFqkJob0V5ONvYlKgaXOx\n",

"uCi6bYiif7AkPyE7RQlZKUopOqk9+Rnak59hX5I/rGNXjQqO0CiW5Dud1MKT+uxYoiRpYSxTeQAA\n",

"GgJlHvgZOeeLFJ+RrDXpydqak6oKW7V9W4DVW+NDeiouLFJjgiPUyt1qYlLAef1oSf75Im2+UOwT\n",

"slN0prxEazJqVsFINUvyR15Ykj+CJflN3pK962QzDE0Ki1R02xCz4wAA0CxQ5oEfMAxDyWdytObC\n",

"5eP2FWTV2t7ZN1CTwnorLixSA9t3lhtLf4EGF+Tjrxk9rtGMHtfUWpKfkJWiXReW5L9/ZKfe/8GS\n",

"/FFBPdS/fRhL8puQI4V5+uLYPklM5QEAaEiUeUBSRXWVduQd1+r0JK1NT1bW+UL7Noss6t8uVHFh\n",

"kZoUFqnu/u1Y3gs0oqtbkt9dXfza8j1romcT18mQoclhfdQnMMjsOAAANBuUebRYReWl2pB1WGvS\n",

"k7Qh87DOVZbbt3m6umtUUHdNDIvU+NBeaufla2JSABer75L8kFYBGhUUYT9LfmuW5DeaQ2dy9a/j\n",

"+yVJCzmDPQAADYoyjxYl/dxp++XjduQeV5Vhs29r69lKE0J7aVJYpEYEdZeXm4eJSQHU1Q+X5B8s\n",

"yNGm7BQlZB3RrpMnlFlcWGtJfnRgiEYHsyS/MSy5MJW/LjxKkW06mR0HAIBmhTKPZs1m2LT3VJbW\n",

"pidpTUayDp3JrbU9IqC9JoZFKi40Uv3ahcjF4mJSUgANwcXioqi2wYpqG6wHoseopLJC2/OOKyHr\n",

"iBKyU3Sk8KQST2Uo8VTNknwfNw8N69TtwiXwerAkvwElnc7RV2n7ZZFFv40db3YcAACaHco8mp3S\n",

"qkp9k3NUa9KTFJ+RrLzSc/ZtrhYXDeoQrolhvTUhtLe6+LU1MSkAR/N299C4kJ4aF9JT0kVL8rNT\n",

"tDkrVafLz2ttRrLW/nBJflB3DQ/qzpL8q7B4T7wk6frwKPVq3dHkNAAAND+UeTQLBWXFWpdxSGvS\n",

"k7Up+4hKqyrt23zcPDT2wuXjxgVHqLWnj4lJAZjpp5bk7/7BknyLas6SPzq4h0YGdVf/dmHycOVt\n",

"sy4OFmRrVfrBmql8P6byAAA4Ar+VwGkdLcrXmvQkrUlP0u6T6TJk2Ld18vbXxAuXjxvasaus/AIO\n",

"4AdYku84ixNrpvI3dI1WREAHk9MAANA80XDgNKptNn2bn37h8nFJOnb2VK3tfdsEKS6styaGRqpv\n",

"YBC/ZAOol0styd+SnaJNl1mSH+wToFHBPTQ6qAdL8i+y71SmVqcnycVi0W9jmMoDAOAolHk0aecr\n",

"y5WQnaI16Ulal3FYp8vP27e5u7hqWMeuiguLVFxobwW3CjAvKIBmJ8jHX7/qcY1+dWFJftLpHG26\n",

"cPm7XXlpyjpfqBVHdmnFkV2yyKLotsEaHdRDo4J7tOgl+d9P5ad2iVH3gPYmpwEAoPlqmb9poEnL\n",

"LTmr+PRkrclI0tacoyqvrrJv8/fw1LiQmsvHjQ6OkK+Hp4lJAbQULhYX9Q0MVt/AYP36oiX531/f\n",

"/nBhnvaeytTeU5l6ft8G+5L8kUHdNTo4Ql1byJL8xPwMxWccqpnKcwZ7AAAcijIP0xmGoeQzufbL\n",

"x+09lVlre2ffNhcuH9dbAzuEc01oAKb74ZL8nAtnyd+UnaIt2akqKGuZS/K/n8rf2LWfuvq3MzkN\n",

"AADNG2Uepqi0VWtH7nGtSU/S2oxkZRSfqbW9f7uwmhPYhUYqIqB9i5hoAXBenViSr29Ppmt95mG5\n",

"Wlz0YOw4s+MAANDsOf9vD3AaReWl2ph1RGsykrQh87DOVpTZt1ld3TQqqIfiwnprQkhvtff2NTEp\n",

"AFy5Sy3J35F3XAmXWZLv7eahYZ26XjhLvvMuyf9+Kj+9ez918WtrchoAAJo/yjwcKuPcaa3NSNaa\n",

"9GRtzz2mKsNm3xbo6aMJob01MbS3Rgb1kLe7h4lJAcAxvN09NDakp8b+YEl+QnaqNmenqKDsvOIz\n",

"Dik+45CkmhPvfV/sR3TqptaePmbGr5PdeSe0KeuI3CwuWhDDVB4AgMZAmUeDshk27S/Itl//PflM\n",

"bq3tPfzb2y8f169dqFxdXExKCgDmuNSS/ITsVCVkpWhn3nFlny/SBym79UHKbvuS/FEXluQPaKJL\n",

"8p9JXCtJmt69vzr7BpqcBgCAlqHp/UYAp1NWValvco/Zj3/PKzlr3+ZisWhg+3D78e9d/Vl6CQDf\n",

"u3hJ/v1Ro1VaVaHtuZdekv/PHyzJHxXUQ93825m+JH9nXpo2Z6fKzeKiB5nKAwDQaCjzuCKny85r\n",

"XcYhrclI0qasFJVUVdi3ebt5aExwhCaGRWp8SE+nWCIKAE2Bl9uPl+RvyU7VpuyUJrsk/5k9NVP5\n",

"GT2uUahvm0b//AAAtFSUedTZsaJTF6bvSdp18oRshmHf1tHbz375uKEdu8rTzd3EpADQPHTy8dfN\n",

"PQbo5h4DZDNsSj6dq00XpvZNYUn+ttxj2ppzVO4urhwrDwBAI6PM47KqbTZ9l5+uNenJWpuRpNSi\n",

"/FrbI9t00sSwSE0M7a2owGDTl3oCQHPmYnFRn8Ag9QkMqrUkf3N2ijZdZkn+0I5d7de3d8SS/O+n\n",

"8rf0uEbBrQIa9LUBAMBPo8yjlpLKCiVkp2htRpLiMw6poOy8fZubxUXDOnVTXGhvxYX1Vkir1iYm\n",

"BYCW7YdL8nNLzmrLhWK/OTtVp8qKtS7zkNZl/mdJ/sigmmI/Iqi72lzlkvytOUe1Pfe4PFxc9Zvo\n",

"sVf99QAAgPqhzEN5JWcVn3FIazOStDk7VeXVVfZt/h6eGhvSSxNDe2tMSE/5eXiamBQAcDkdvf00\n",

"vfsATe9ee0n+5uwU7cxLU/b5Iq1M2a2VP1iSPzKou65p37leS/INw9DiC1P5mRGDFMRUHgCARkeZ\n",

"b4EMw9DhwjytTU/Wmowk7cnPqLU9tFVr+/L5QR27yN3F1aSkAIArcakl+Tvy0pSQdaRBluRvyUnV\n",

"jrw0WV3d9ED0mMb7wgAAgB1lvoWotFVrZ16a1qYnaU16stKLT9faHts21H75uF6tO3D8OwA0I14X\n",

"rjIyJjhC0s8vye/k7W8v9j9ckm8Yhp7ZEy9JujVikDr5+Df+FwQAACjzzdm5ijJtzDqi1elJ2pB5\n",

"SEUVZfZtVlc3jejUXRPDIjUhtJc6ePuZmBQA0JgutSQ/ITtFCReW5OeU1F6SHxUYpFHBNde2L6mq\n",

"0O6TJ2R1ddOvmcoDAGAaynwzk1VceOHyccnalntMlbZq+7Y2Vh9NCO2liWGRGhXUQ97uHiYmBQA0\n",

"BRcvyb/voiX5m7NStCk7RYfO5GpfQZb2FWRp6b6N9ufd3nOwOvKHYAAATEOZd3KGYWh/QZbWZCRr\n",

"bXqSDp7OqbW9m387TQyN1MSw3urfLkyuLi4mJQUAOIOLl+T/Sf9Zkp+QnaqErBSdKiuWr7tV90eN\n",

"MTsqAAAtGmXeCZVXV+mbnKNam5GsNelJyi05a9/mYrFoYPvOiguNVFxYb3Xzb2diUgCAs/vhkvzD\n",

"Z07Kz8NT7b19zY4GAECLRpl3EmfKzmtd5mGtzUjWxszDOl9VYd/m7eah0cE9NDE0UuNCeyrQs5WJ\n",

"SQEAzZWLxUW923Q0OwYAABBlvkk7fvaU/fJxu/JOqNqw2bd18PJVXFik4kJ7a3inbvJ0czcxKQAA\n",

"AACgMVHmmxCbYdOe/AytSa9ZPp9SdLLW9t6tO2rihQIf3TZYLhaOfwcAAACAlsihZX7BggX64osv\n",

"dOLECe3Zs0exsbE/eb8kff311/rjH/8om82mqqoq/e53v9Odd97pyJimKq2q0ObsVK1JT1J8xiGd\n",

"Kiu2b3OzuGhIx66KC+utiaG9FerbxsSkAAAAAICmwqFlfvr06fr973+vESNG1Ol+wzA0a9Ysbdy4\n",

"UdHR0UpLS1OvXr104403yte3eZ1o5+u0A/oo9VslZKeovLrKfr+vu1XjQmouHzcmOEL+Vi8TUwIA\n",

"AAAAmiKHlvlRo0bV635JslgsKiwslCSdPXtWgYGBslqtl3xseXm5ysvLa91XXV19ycc2Nd+ePKG1\n",

"GcmSpJBWAYoLjdSksEgN6hAuD1eOfgAAAAAAXF6Tao0Wi0UrV67UjTfeKB8fH505c0affvqpPDw8\n",

"Lvn4p59+Wk888USt+4YMGdIYUa/atK6x8vPwVFxYpHq37iiLxWJ2JAAAAACAk2hSZ1CrqqrSk08+\n",

"qU8//VQnTpzQunXrdPvtt+vUqVOXfPxjjz2moqKiWrdBgwY1cuorE9U2WA/Gjldkm04UeQAAAABA\n",

"vTSpMp+YmKjs7Gz7MvyBAwcqJCREe/bsueTjrVar/Pz8at1cXV0bMzIAAAAAAI2uSZX50NBQ5eTk\n",

"KDm55ljy1NRUHT16VD179jQ5GQAAAAAATYdDj5mfP3++vvrqK+Xm5mrSpEny9fVVamrqZe/v0KGD\n",

"Xn31Vf3qV7+Si4uLbDabli5dqrCwMEfGBAAAAADAqVgMwzDMDtGQFi5cqMWLF5sdAwAAAAAAh2lS\n",

"y+wBAAAAAMDPo8wDAAAAAOBkKPMAAAAAADgZyjwAAAAAAE6GMg8AAAAAgJOhzAMAAAAA4GQo8wAA\n",

"AAAAOBnKPAAAAAAAToYyDwAAAACAk6HMAwAAAADgZCjzAAAAAAA4Gco8AAAAAABOhjIPAAAAAICT\n",

"ocwDAAAAAOBkKPMAAAAAADgZi2EYhtkhGtKNN96o8PBws2PUSXV1tXbu3KlBgwbJ1dXV7Dj4Cewr\n",

"58L+ci7sL+fC/nIu7C/nwv5yLuwv5+Js+6tz58568MEHf/Ixza7MO5OzZ8/K399fRUVF8vPzMzsO\n",

"fgL7yrmwv5wL+8u5sL+cC/vLubC/nAv7y7k0x/3FMnsAAAAAAJwMZR4AAAAAACdDmQcAAAAAwMlQ\n",

"5k1ktVr1+OOPy2q1mh0FP4N95VzYX86F/eVc2F/Ohf3lXNhfzoX95Vya4/7iBHgAAAAAADgZJvMA\n",

"AAAAADgZyjwAAAAAAE6GMg8AAAAAgJOhzJvg5MmT6tChg6ZNm/aTj5k8ebJ69Oihvn37KiEhofEC\n",

"QpL0wgsvKCoqSrGxserbt6+ef/75yz42PDxcPXv2VGxsrGJjY7Vy5cpGTAqpfvsrJSVFw4YNU0RE\n",

"hAYOHKiDBw82YlJI0vPPP6++ffsqKipK0dHRevfddy/72DFjxqhLly72768lS5Y0YlJI9dtfvH+Z\n",

"76uvvtKAAQNktVr10EMP/eRjef8yV332Fe9d5rPZbPrNb36jbt26qXv37lq6dOllH8v3ljnq+n3y\n",

"+uuvq0ePHurWrZvuvvtuVVZWNnLSBmKg0U2bNs2YM2eOMXXq1Ms+5q677jIef/xxwzAMY+fOnUZw\n",

"cLBRUVHROAFhGIZhFBYW2v9dVFRkhIaGGt99990lH9u5c2djz549jZQMl1Kf/TV27Fhj+fLlhmEY\n",

"xkcffWRcc801jRERF4mPj7fvs/T0dCMwMNBITU295GNHjx5t/N///V8jpsMP1Wd/8f5lvsOHDxuJ\n",

"iYnGf//3fxsPPvjgTz6W9y9z1Wdf8d5lvrfeessYN26cUVVVZRQUFBhhYWHGgQMHLvlYvrfMUZfv\n",

"k2PHjhmdOnUycnJyDJvNZvziF78wli5d2shJGwaT+Ub2+uuvq0uXLho5cuRPPu7DDz/UvffeK0ka\n",

"OHCggoKCtGnTpsaIiAv8/f3t/z5//rzz/sWuhajr/jp58qR2796tWbNmSZJuuukmZWRkKDU1tVFy\n",

"osb48ePt+yw0NFQdO3ZURkaGyalwOfXZX7x/mS8iIkIxMTFyc3MzOwp+Rl33Fe9dTcPKlSt19913\n",

"y9XVVW3atNGMGTO0YsUKs2Phgrp+n3z88ce64YYb1LFjR1ksFt17771Oux8p843o+PHjevnll/W3\n",

"v/3tJx9XUFCgyspKdezY0X5feHi40tPTHR0RP/Dxxx+rT58+Cg8P1yOPPKJ+/fpd9rF33HGHoqKi\n",

"NHfuXOXn5zdiSnyvLvsrIyNDnTp1sv/iZLFYFBYWxveXieLj43XmzBkNHDjwso959NFHFRUVpRkz\n",

"ZujYsWONmA4/9FP7i/cv58T7V9PHe1fTkJ6ers6dO9s//rmfb3xvNa66fp/Udz82ZZT5BjR06FC1\n",

"bdv2kreMjAzNmTNHS5culZeXl9lRoZ/fX5I0ffp0HTx4UIcPH9a7776rw4cPX/K1EhIStG/fPn33\n",

"3Xdq27at7rzzzsb8UlqEhtxfcLy67C9J2r9/v+666y6tXLlSPj4+l3ytd955R4cOHdK+ffs0cuRI\n",

"XX/99Y31ZbQYDbm/4Hh13V91wfuXYzXkvoLj8b0FZ8P6qwa0bdu2y24rKirSvn37NGPGDElScXGx\n",

"SkpKNH78eK1bt67WYwMDA+Xm5qbc3Fz7dCMtLU1hYWGOC98C/dT++qHw8HANHjxYX375pXr27Pmj\n",

"7d/vG3d3dz300EOKiIhosJyo0VD7KzQ0VDk5OaqqqpKbm5sMw1B6ejrfXw2sLvsrKSlJ119/vd54\n",

"4w2NGDHiso8LDQ2VVPMX9gceeECPPPKICgoKFBgY2GB5W7qG2l+8fzWO+vw8/Dm8fzlWQ+0r3rsa\n",

"x8/tr7CwMJ04cUJDhw6V9NM/3/jeanx1/T4JCwvT0aNH7R878/sUk/lG4u/vr4KCAqWlpSktLU2L\n",

"Fi3SxIkTf1Tkv3fzzTfr5ZdfliTt2rVLWVlZGj16dGNGbvGSkpLs/87Pz9f69esVHR39o8edP39e\n",

"hYWF9o9XrFjxk8vx4Rh13V/t27dX//797Wfj/uSTTxQSEqLu3bs3WlZIycnJmjJlil599VXFxcVd\n",

"9nFVVVXKy8uzf/zJJ5+oQ4cOFPlGVtf9JfH+5Ux4/3IevHc1DTfffLNee+01VVdX6/Tp01q5cqV9\n",

"UHcxvrfMUdfvk5tuuklffPGFcnNzZRiGXn75Zd1yyy1mRL565p5/r+Vavnx5rbPZ79q1y7j22mvt\n",

"H+fm5hpxcXFG9+7djcjISGP9+vUmpGzZ7rnnHqN3795GTEyMER0dbbzwwgv2bZ9//rkxd+5cwzAM\n",

"4+jRo0ZsbKwRFRVl9O3b17jhhhuM48ePm5S65arr/jIMwzh06JAxZMgQo0ePHsaAAQOMffv2mRG5\n",

"RZswYYIREBBgxMTE2G+rVq0yDKP2z8Pi4mJjwIABRt++fY3o6Ghj3LhxRmJiopnRW6S67i/D4P2r\n",

"KYiPjzeCg4MNX19fo1WrVkZwcLDx+eefG4bB+1dTU9d9ZRi8dzUFVVVVxv3332906dLF6Nq1q/Hs\n",

"s8/at/G91TRc7vtk7ty59u8twzCMV1991ejatavRtWtXY86cOU571RWLYRiG2X9QAAAAAAAAdccy\n",

"ewAAAAAAnAxlHgAAAAAAJ0OZBwAAAADAyVDmAQBoocLDw5WYmFiv5zzyyCP685//7JA8AACg7ijz\n",

"AAAAAAA4Gco8AAAt3JgxY/TII49o5MiR6tatm+699177tpycHE2aNEmRkZGaMGGCMjMz7dsqKyv1\n",

"6KOPatCgQYqNjdWvfvUrnTlzRvn5+QoPD9f27dslSR9//LFiYmJUWlra6F8bAADNFWUeAADo6NGj\n",

"2rBhgw4cOKDVq1dr27ZtkqQFCxZo0KBBSkpK0ltvvaV169bZn/O///u/8vHx0c6dO5WYmKioqCj9\n",

"8Y9/VLt27fTOO+/otttu086dO/XQQw/po48+kpeXl1lfHgAA9fL888+rb9++ioqKUnR0tN59993L\n",

"PnbMmDHq0qWLYmNjFRsbqyVLltTrcy1fvlwWi0WfffZZvZ7nVq9HAwCAZmnGjBlyc3OTm5ubYmNj\n",

"dfToUQ0dOlTr1q3TokWLJEnBwcG64YYb7M/57LPPVFRUpE8++USSVFFRofDwcEnSyJEjNXfuXA0b\n",

"Nkxvv/22IiIiGv1rAgCgLsaMGaM333zT/h4mSX369NHWrVvl7++vjIwM9evXT0OHDlW3bt0u+RpL\n",

"lizRtGnT6v2509LS9Nprr2nIkCH1fi6TeQAAIE9PT/u/XV1dVVVVdcnHWSwW+78Nw9A///lPJSYm\n",

"KjExUUlJSfr666/t2/fs2aN27dopIyPDccEBAHCA8ePHy9/fX5IUGhqqjh07XtH7WUpKiq677joN\n",

"HDhQ0dHRWrp0qX2bzWbTvHnz9M9//lNWq7Xer02ZBwAAlzVhwgS98cYbkmqOn//iiy/s26ZNm6Yl\n",

"S5aopKREklRSUqKDBw9KkpYuXaozZ85o7969euWVV7R169bGDw8AQAOIj4/XmTNnNHDgwMs+5tFH\n",

"H1VUVJRmzJihY8eOSZKqq6s1c+ZMPfPMM9q1a5e2b9+uV199Vbt27ZIkLV68WMOHD9eAAQOuKBfL\n",

"7AEAwGU999xzmj17tiIjIxUcHKxx48bZt/3hD39QeXm5Bg8ebJ/Yf3/fokWLtGPHDrVv317vvvuu\n",

"Zs2apV27dikwMNCsLwUAALs77rhD+/btkySlpqZqypQp8vDwkFRzGNn3S+7379+vu+66SytXrpSP\n",

"j88lX+udd95RaGioDMPQCy+8oOuvv15JSUk6fPiwDh48qFtuucX+2HPnzikpKUleXl765JNPlJCQ\n",

"cMVfg8UwDOOKnw0AAAAAgBO71DHzkpSUlKRrr71Wy5YtU1xcXJ1fz9PTU1lZWcrNzdXEiROVlZX1\n",

"o8e89NJL+stf/mJfXp+bmys/Pz898cQTuu++++r0eVhmDwAAAADARZKTkzVlyhS9+uqrP1nkq6qq\n",

"lJeXZ//4k08+UYcOHRQYGKiePXvKz89Py5cvt29PTU3V6dOndd999yknJ0dpaWlKS0vTkCFD9Oqr\n",

"r9a5yEuUeQAAAAAAalmwYIGKior0hz/8wX7JudWrV0uSdu/erSlTpkiSysvLdd111ykqKkoxMTF6\n",

"8cUX7eeXcXNz05dffqlPP/1U0dHR6tOnj+bOnavS0tIGycgyewAAAAAAnAyTeQAAAAAAnAxlHgAA\n",

"AAAAJ0OZBwAAAADAyVDmAQAAAABwMpR5AAAAAACcDGUeAAAAAAAnQ5kHAAAAAMDJUOYBAAAAAHAy\n",

"lHkAAAAAAJwMZR4AAAAAACfz/wF8Oq4/VCfxZwAAAABJRU5ErkJggg==\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-33b0878e-6c76-4d19-8641-c5d0e218655a\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-33b0878e-6c76-4d19-8641-c5d0e218655a\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"import seaborn as sns\n",

"def \_plot\_series(series, series\_name, series\_index=0):\n",

" palette = list(sns.palettes.mpl\_palette('Dark2'))\n",

" counted = (series['Index']\n",

" .value\_counts()\n",

" .reset\_index(name='counts')\n",

" .rename({'index': 'Index'}, axis=1)\n",

" .sort\_values('Index', ascending=True))\n",

" xs = counted['Index']\n",

" ys = counted['counts']\n",

" plt.plot(xs, ys, label=series\_name, color=palette[series\_index % len(palette)])\n",

"\n",

"fig, ax = plt.subplots(figsize=(10, 5.2), layout='constrained')\n",

"df\_sorted = \_df\_18.sort\_values('Index', ascending=True)\n",

"\_plot\_series(df\_sorted, '')\n",

"sns.despine(fig=fig, ax=ax)\n",

"plt.xlabel('Index')\n",

"\_ = plt.ylabel('count()')"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-4cc553db-6325-4a28-a0df-a42c69010e8b\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAoHElEQVR4nO3dfZTWdZ3/8dfA6KQU6CqCCcMIiImAYwh5k2FqeZOShqZ7cl0U\n",

"DdtaLY7rzSl+ZXvSdtc071rEJbfkrFlgxrHOdo66J01rwUWyQE3QacBEyxDyDhn4/v5wm1/zE3DG\n",

"5uLio4/HOdc5XNf3M9e8r/M5l1+fc11zTUNVVVUAAACAYvSp9wAAAABAz4h5AAAAKIyYBwAAgMKI\n",

"eQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKMxbPuavueaaeo8AAAAAveotH/O/+c1v6j0C\n",

"AAAA9Kq3fMwDAADAW42YBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAA\n",

"gMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkA\n",

"AAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyY\n",

"BwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDC\n",

"iHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAA\n",

"KIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcA\n",

"AIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwtQ0\n",

"5s8///y0tLSkoaEhS5Ys2eK6OXPmZJ999smIESNy7rnnZsOGDV2OV1WVI488MrvsskstxwUAAIAi\n",

"1DTmTznllPz0pz/NsGHDtrjmySefzMyZM3Pfffdl+fLleeaZZzJ79uwua66++uqMGDGilqMCAABA\n",

"MWoa8x/4wAcyZMiQra6ZN29eJk+enMGDB6ehoSHnnXdebr311s7jS5cuzR133JFLLrnkDb/f+vXr\n",

"s27dui6XjRs3/sWPAwAAALYndf+d+fb29i6v3Le0tKS9vT1JsmHDhpx77rm58cYb07dv3ze8ryuu\n",

"uCIDBgzoclm4cGHNZgcAAIB6qHvMb81ll12Wj33sY9lvv/26tf7SSy/N2rVru1wmTpxY4ykBAABg\n",

"22qs9wDNzc1ZsWJF5/W2trY0NzcnSX7yk5+kvb09119/fTo6OrJu3bq0tLRk0aJFGThw4Ovuq6mp\n",

"KU1NTV1u684r+gAAAFCSur8yP2XKlCxYsCCrV69OVVWZNWtWTj/99CTJfffdl9/85jdpa2vLT3/6\n",

"0/Tv3z9tbW2bDXkAAAB4u6hpzE+fPj1DhgzJqlWrcswxx2TkyJFJknPOOScLFixIkgwfPjyXXXZZ\n",

"DjvssIwcOTIDBw7M9OnTazkWAAAAFK2hqqqq3kPU0owZM3LVVVfVewwAAADoNXV/mz0AAADQM2Ie\n",

"AAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj\n",

"5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACg\n",

"MGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAA\n",

"AAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YB\n",

"AACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBi\n",

"HgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAK\n",

"I+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAA\n",

"oDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4A\n",

"AAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKU9OYP//889PS0pKGhoYs\n",

"WbJki+vmzJmTffbZJyNGjMi5556bDRs2JEnuueeeTJw4MaNHj87++++fiy66KJs2barlyAAAALDd\n",

"q2nMn3LKKfnpT3+aYcOGbXHNk08+mZkzZ+a+++7L8uXL88wzz2T27NlJkl133TXf+c53smzZsvzP\n",

"//xPHnjggXz729+u5cgAAACw3atpzH/gAx/IkCFDtrpm3rx5mTx5cgYPHpyGhoacd955ufXWW5Mk\n",

"Bx54YIYPH54kecc73pHW1ta0tbVt8b7Wr1+fdevWdbls3Lix1x4PAAAAbA/q/jvz7e3tXV65b2lp\n",

"SXt7++vWrV69OvPmzcsJJ5ywxfu64oorMmDAgC6XhQsX1mRuAAAAqJe6x3x3rFu3LieeeGIuuuii\n",

"HHTQQVtcd+mll2bt2rVdLhMnTtyGkwIAAEDtNdZ7gObm5qxYsaLzeltbW5qbmzuv//GPf8yxxx6b\n",

"j370o5kxY8ZW76upqSlNTU1dbuvbt2/vDgwAAAB1VvdX5qdMmZIFCxZk9erVqaoqs2bNyumnn54k\n",

"eeGFF3Lsscfm2GOPzRe+8IU6TwoAAADbh5rG/PTp0zNkyJCsWrUqxxxzTEaOHJkkOeecc7JgwYIk\n",

"yfDhw3PZZZflsMMOy8iRIzNw4MBMnz49SXLNNddk4cKFuf3229Pa2prW1tZ85StfqeXIAAAAsN1r\n",

"qKqqqvcQtTRjxoxcddVV9R4DAAAAek3d32YPAAAA9IyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAo\n",

"jJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAA\n",

"gMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkA\n",

"AAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyY\n",

"BwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDC\n",

"iHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAA\n",

"KIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcA\n",

"AIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCNL6ZL1q2bFlWrVqVnXba\n",

"KWPHjs0uu+zSy2MBAAAAW9LtmP/jH/+YK6+8MjfddFN23nnnDBo0KK+88kpWrFiRiRMn5uKLL85R\n",

"Rx1Vy1kBAACA9CDmP/jBD+bMM8/MQw89lEGDBnXevmnTptx3332ZNWtWli9fnunTp9dkUAAAAOA1\n",

"3Y75+++/P01NTa+7vU+fPpk0aVImTZqU9evX9+pwAAAAwOt1+wPwNhfyb2YNAAAA8JfpdsyfcMIJ\n",

"eeCBBzZ77Pnnn8/Xvva13Hjjjb02GAAAALB53X6b/eWXX55LL700y5Yty4QJEzo/AO/RRx/NU089\n",

"lU9/+tM5++yzazkrAAAAkB7E/Lhx4/LDH/4wK1euzE9+8pOsWrUqO++8cz7xiU/k/e9/fxob39Rf\n",

"uQMAAAB6qMcFvmbNmpxxxhldbnv44Yczbty4XhsKAAAA2LJu/878n0ydOrVbtwEAAAC10e1X5p99\n",

"9tmsXr06L7/8cn75y1+mqqokydq1a/Piiy/WbEAAAACgq27H/K233pqvf/3r+e1vf5vJkyd33j5g\n",

"wIBcdNFFNRkOAAAAeL1ux/wFF1yQCy64IP/4j/+YmTNn1nImAAAAYCt6/AF4M2fOzKZNm7J69ep0\n",

"dHR03t7c3NyrgwEAAACb1+MPwPvWt76VXXbZJWPHjs348eMzfvz4HHTQQZtde/7556elpSUNDQ1Z\n",

"smTJFu9zzpw52WeffTJixIice+652bBhQ7eOAQAAwNtRQ/WnT7LrphEjRuRHP/pR9t133zdce++9\n",

"92b48OF5//vfnzvuuCOtra2vW/Pkk0/msMMOy+LFizNo0KB89KMfzTHHHJNPf/rTWz3WXTNmzMhV\n",

"V13Vk4e4zVVVlZc7/JACAACglnZq3CENDQ31HqNX9Pht9rvvvnu3Qj5JPvCBD7zhmnnz5mXy5MkZ\n",

"PHhwkuS8887L5Zdfnk9/+tNbPbY569evz/r167vctnHjxm7NWk8vd2zIqLn/p95jAAAAvKX9+owv\n",

"Z+cddqz3GL2ix2+zP+mkk/L1r389zz77bNatW9d5ebPa29szbNiwzustLS1pb29/w2Obc8UVV2TA\n",

"gAFdLgsXLnzTswEAAMD2qMevzH/+859P8trb1xsaGlJVVRoaGraLV8AvvfTSzJgxo8ttJXzy/k6N\n",

"O+TXZ3y53mMAAAC8pe3UuEO9R+g1PY75TZs29eoAzc3NWbFiRef1tra2zk/G39qxzWlqakpTU1OX\n",

"2/r27dur89ZCQ0PDW+atHgAAANRej99m39umTJmSBQsWZPXq1amqKrNmzcrpp5/+hscAAADg7arH\n",

"Md+nT5/07dv3dZfNmT59eoYMGZJVq1blmGOOyciRI5Mk55xzThYsWJAkGT58eC677LIcdthhGTly\n",

"ZAYOHJjp06e/4TEAAAB4u+rxn6Z78cUXO//98ssv59vf/nY2btyYf/iHf+j14XpDCX+aDgAAAHqi\n",

"x6/M9+vXr/Oy++67Z8aMGZk3b14tZgMAAAA24y/+nflHH300v//973tjFgAAAKAbevxp9rvuumsa\n",

"GhqSJB0dHUmS6667rnenAgAAALaoxzG/ZMmS//fFjY0ZPHhwEX/+DQAAAN4qehzzw4YNy0svvdQZ\n",

"9bvuumt23nnn3p4LAAAA2IIex/wDDzyQKVOmZPDgwUmSZ555JvPnz88hhxzS68MBAAAAr9fjmP/T\n",

"p9cfdthhSV6L+8997nP5+c9/3uvDAQAAAK/X40+zf/nllztDPkkOPfTQvPLKK706FAAAALBlPY75\n",

"d77znbnrrrs6r999993p169frw4FAAAAbFmP32Z/7bXX5mMf+1jnJ9hv2rQpt99+e68PBgAAAGxe\n",

"j2P+t7/9bR588ME888wzSZJBgwZl4cKFvT4YAAAAsHk9fpv9zJkzM3DgwIwZMyZjxozJ7rvvnpkz\n",

"Z9ZiNgAAAGAzehzz/7+GhoZs3LixN2YBAAAAuqHHMf+ud70rDzzwQOf1+++/P+9617t6dSgAAABg\n",

"y3r8O/P//M//nJNPPjnvec97kiSPP/54vv/97/f6YAAAAMDm9TjmDznkkDzyyCP52c9+luS1vzO/\n",

"yy679PZcAAAAwBb0OOaTZNddd83xxx/f27MAAAAA3fAXfwAeAAAAsG2JeQAAACiMmAcAAIDCiHkA\n",

"AAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyY\n",

"BwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDC\n",

"iHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAA\n",

"KIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcA\n",

"AIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5\n",

"AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiM\n",

"mAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMLUNOYff/zxHHrooRk1alQmTJiQpUuXvm7N\n",

"pk2bcuGFF2bMmDF5z3vek2nTpuXVV1/tPP5P//RPGT16dFpbW3PwwQdn4cKFtRwZAAAAtns1jfnp\n",

"06fnk5/8ZH7961/n4osvztSpU1+3Zs6cOVm8eHEWL16cRx55JH369Mk111yTJFmyZEm+8Y1vZOHC\n",

"hVmyZEk+85nP5DOf+UwtRwYAAIDtXs1i/tlnn82DDz6YM844I0kyZcqUrFy5MsuXL++y7he/+EWO\n",

"Pvro7LjjjmloaMhxxx2XW265JUnS0NCQDRs25MUXX0ySPP/88xkyZMgWv+f69euzbt26LpeNGzfW\n",

"6BECAABAfdQs5leuXJk999wzjY2NSV4L8+bm5rS3t3dZN378+CxYsCDr1q3Lhg0b8t3vfjdtbW1J\n",

"kgMOOCCf+9znsvfee2fIkCG5+uqrc911123xe15xxRUZMGBAl4u35QMAAPBWU/cPwJs6dWqOPfbY\n",

"TJo0KZMmTcqoUaM6fwDw5JNP5vbbb8/y5cuzatWqfO5zn8tpp522xfu69NJLs3bt2i6XiRMnbquH\n",

"AgAAANtEzWJ+6NChefrpp9PR0ZEkqaoq7e3taW5u7rKuoaEhX/rSl/LQQw/lgQceyOjRo7P//vsn\n",

"SebPn5+xY8fm3e9+d5LkrLPOyv3339/lA/L+XFNTU/r379/l0rdv31o9RAAAAKiLmsX8Hnvskfe+\n",

"972ZO3duktfCfMiQIRk5cmSXda+88krWrFmTJPn973+fr371q7nooouSJMOHD8/999+fF154IUly\n",

"5513ZtSoUdlxxx1rNTYAAABs9xpreec33nhjpk6dmssvvzz9+/fPzTffnCQ555xzMnny5EyePDlr\n",

"167NEUcckT59+mTTpk254IILcuKJJyZJTj755CxatCgHHXRQmpqa0q9fv/zHf/xHLUcGAACA7V5D\n",

"VVVVvYeopRkzZuSqq66q9xgAAADQa+r+AXgAAABAz4h5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDC\n",

"iHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAA\n",

"KIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcA\n",

"AIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5\n",

"AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiM\n",

"mAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACA\n",

"woh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAA\n",

"ACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgH\n",

"AACAwoh5AAAAKIyYBwAAgMKIeQAAACiMmAcAAIDCiHkAAAAojJgHAACAwoh5AAAAKIyYBwAAgMKI\n",

"eQAAACiMmAcAAIDCiHkAAAAoTE1j/vHHH8+hhx6aUaNGZcKECVm6dOnr1mzatCkXXnhhxowZk/e8\n",

"5z2ZNm1aXn311c7j7e3tOfHEE7Pvvvtm9OjRue6662o5MgAAAGz3ahrz06dPzyc/+cn8+te/zsUX\n",

"X5ypU6e+bs2cOXOyePHiLF68OI888kj69OmTa665JklSVVVOPvnknHnmmXnssceybNmyfPzjH6/l\n",

"yAAAALDdq1nMP/vss3nwwQdzxhlnJEmmTJmSlStXZvny5V3W/eIXv8jRRx+dHXfcMQ0NDTnuuONy\n",

"yy23JEnuvvvuNDU15dRTT+1cP2jQoC1+z/Xr12fdunVdLhs3bqzBowMAAID6qVnMr1y5MnvuuWca\n",

"GxuTJA0NDWlubk57e3uXdePHj8+CBQuybt26bNiwId/97nfT1taWJFm2bFkGDhyY008/PQceeGBO\n",

"PvnkPPHEE1v8nldccUUGDBjQ5bJw4cJaPUQAAACoi7p/AN7UqVNz7LHHZtKkSZk0aVJGjRrV+QOA\n",

"jo6O3HPPPZk5c2YeeuihHHPMMVt9m/2ll16atWvXdrlMnDhxWz0UAAAA2CZqFvNDhw7N008/nY6O\n",

"jiSv/f57e3t7mpubu6xraGjIl770pTz00EN54IEHMnr06Oy///5Jkubm5hx44IGd1//mb/4mixcv\n",

"zoYNGzb7PZuamtK/f/8ul759+9bqIQIAAEBd1Czm99hjj7z3ve/N3LlzkyTz58/PkCFDMnLkyC7r\n",

"XnnllaxZsyZJ8vvf/z5f/epXc9FFFyVJjjvuuKxatSpPPfVUkuRHP/pR9ttvv+ywww61GhsAAAC2\n",

"e421vPMbb7wxU6dOzeWXX57+/fvn5ptvTpKcc845mTx5ciZPnpy1a9fmiCOOSJ8+fbJp06ZccMEF\n",

"OfHEE5Mk/fr1y6xZs/KRj3wkVVVlwIAB+c53vlPLkQEAAGC711BVVVXvIWppxowZueqqq+o9BgAA\n",

"APSaun8AHgAAANAzYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAK\n",

"I+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAA\n",

"oDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4A\n",

"AAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPm\n",

"AQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAw\n",

"Yh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAA\n",

"CiPmAQAAoDBiHgAAAAoj5gEAAKAwYh4AAAAKI+YBAACgMGIeAAAACiPmAQAAoDANVVVV9R6ilj72\n",

"sY+lpaWl3mO8oY0bN2bhwoWZOHFi+vbtW+9x2Ap7VRb7VQ57VRb7VQ57VRb7VQ57VZbS9mvYsGG5\n",

"4IILtrrmLR/zpVi3bl0GDBiQtWvXpn///vUeh62wV2WxX+WwV2WxX+WwV2WxX+WwV2V5K+6Xt9kD\n",

"AABAYcQ8AAAAFEbMAwAAQGHE/HaiqakpX/ziF9PU1FTvUXgD9qos9qsc9qos9qsc9qos9qsc9qos\n",

"b8X98gF4AAAAUBivzAMAAEBhxDwAAAAURswDAABAYcT8duDZZ5/NoEGDctJJJ211zbHHHpt99tkn\n",

"Y8aMyb333rvtBiQ33HBDxo4dm9bW1owZMybXXnvtFte2tLRk3333TWtra1pbW3Pbbbdtw0lJerZf\n",

"jz/+eA499NCMGjUqEyZMyNKlS7fhpFx77bUZM2ZMxo4dm3HjxmXu3LlbXHvEEUdk77337nxuXX31\n",

"1dtwUnqyV85Z9ffDH/4w48ePT1NTUz772c9uda3zVn31ZK+cs+pv06ZN+fu///uMGDEiI0eOzPXX\n",

"X7/FtZ5b9dHd58mcOXOyzz77ZMSIETn33HOzYcOGbTxpL6iou5NOOqk6++yzq49+9KNbXHPWWWdV\n",

"X/ziF6uqqqqFCxdWe+21V/Xqq69umwGpnn/++c5/r127tho6dGi1ePHiza4dNmxY9dBDD22jydic\n",

"nuzXBz/4wermm2+uqqqqvve971UHHXTQthiR/3XXXXd17ld7e3u12267VcuXL9/s2kmTJlXf//73\n",

"t+F0/Lme7JVzVv099thj1ZIlS6rPf/7z1QUXXLDVtc5b9dWTvXLOqr9vfetb1ZFHHll1dHRUzz33\n",

"XNXc3Fz96le/2uxaz6366M7z5Iknnqj23HPP6umnn642bdpUnXjiidX111+/jSf9y3llvs7mzJmT\n",

"vffeO4cffvhW1333u9/NeeedlySZMGFC3v3ud+cnP/nJthiRJAMGDOj894svvljmT+7eRrq7X88+\n",

"+2wefPDBnHHGGUmSKVOmZOXKlVm+fPk2mZPkqKOO6tyvoUOHZvDgwVm5cmWdp2JzerJXzln1N2rU\n",

"qBxwwAFpbGys9yi8ge7ulXPW9uG2227Lueeem759++av/uqvctppp+XWW2+t91j8r+4+T+bNm5fJ\n",

"kydn8ODBaWhoyHnnnVfkPor5OnryyScza9asfOUrX9nquueeey4bNmzI4MGDO29raWlJe3t7rUfk\n",

"z8ybNy/7779/WlpacuGFF+bAAw/c4tozzzwzY8eOzbRp0/K73/1uG07Jn3Rnv1auXJk999yz83+g\n",

"Ghoa0tzc7LlVJ3fddVfWrFmTCRMmbHHNJZdckrFjx+a0007LE088sQ2n489tba+cs8rkvLX9c87a\n",

"PrS3t2fYsGGd19/ov2+eW9tWd58nPd3H7ZWYr6FDDjkku++++2YvK1euzNlnn53rr78+O+20U71H\n",

"fdt7o71KklNOOSVLly7NY489lrlz5+axxx7b7H3de++9efjhh7N48eLsvvvu+du//dtt+VDeFnpz\n",

"v6it7uxVkvzyl7/MWWedldtuuy39+vXb7H3dcsstefTRR/Pwww/n8MMPzwknnLCtHsbbQm/uFbXX\n",

"3f3qDuet2urNvaL2PLcoifde1dDPfvazLR5bu3ZtHn744Zx22mlJkhdeeCEvvfRSjjrqqNx9991d\n",

"1u62225pbGzM6tWrO1/paGtrS3Nzc+2Gf5vZ2l79/1paWvK+970vd955Z/bdd9/XHf/Tvuywww75\n",

"7Gc/m1GjRvXanLymt/Zr6NChefrpp9PR0ZHGxsZUVZX29nbPrV7Unb1atmxZTjjhhHzzm9/M+9//\n",

"/i2uGzp0aJLXfsr+mc98JhdeeGGee+657Lbbbr0279tZb+2Vc9a20ZP/Dr4R563a6q29cs7aNt5o\n",

"v5qbm/Ob3/wmhxxySJKt//fNc2vb6+7zpLm5OStWrOi8Xup5yivzdTJgwIA899xzaWtrS1tbW668\n",

"8sp8+MMffl3I/8mpp56aWbNmJUkWLVqUp556KpMmTdqWI7+tLVu2rPPfv/vd73LPPfdk3Lhxr1v3\n",

"4osv5vnnn++8fuutt2717fjURnf3a4899sh73/vezk/lnj9/foYMGZKRI0dus1nf7h555JEcf/zx\n",

"mT17dj70oQ9tcV1HR0eeeeaZzuvz58/PoEGDhPw21N29SpyzSuK8VQ7nrO3DqaeemptuuikbN27M\n",

"H/7wh9x2222dL879Oc+t+uju82TKlClZsGBBVq9enaqqMmvWrJx++un1GPkvU9/P3+NPbr755i6f\n",

"Zr9o0aLquOOO67y+evXq6kMf+lA1cuTIavTo0dU999xThynfvj75yU9W++23X3XAAQdU48aNq264\n",

"4YbOYz/4wQ+qadOmVVVVVStWrKhaW1ursWPHVmPGjKkmT55cPfnkk3Wa+u2ru/tVVVX16KOPVgcf\n",

"fHC1zz77VOPHj68efvjheoz8tnX00UdXu+yyS3XAAQd0Xv7zP/+zqqqu/x184YUXqvHjx1djxoyp\n",

"xo0bVx155JHVkiVL6jn6205396qqnLO2B3fddVe11157Ve9617uqd77zndVee+1V/eAHP6iqynlr\n",

"e9Pdvaoq56ztQUdHR/V3f/d31d57710NHz68+vrXv955zHNr+7Cl58m0adM6n1tVVVWzZ8+uhg8f\n",

"Xg0fPrw6++yzi/yrKw1VVVX1/oECAAAA0H3eZg8AAACFEfMAAABQGDEPAAAAhRHzAPA219LSkiVL\n",

"lvToay688MJ86Utfqsk8AMAbE/MAAABQGDEPACRJjjjiiFx44YU5/PDDM2LEiJx33nmdx55++ukc\n",

"c8wxGT16dI4++uisWrWq89iGDRtyySWXZOLEiWltbc3HP/7xrFmzJr/73e/S0tKSn//850mSefPm\n",

"5YADDsjLL7+8zR8bALzViHkAoNOKFSvyX//1X/nVr36VH//4x/nZz36WJDn//PMzceLELFu2LN/6\n",

"1rdy9913d37Nv/zLv6Rfv35ZuHBhlixZkrFjx+YLX/hCBg4cmFtuuSWf+MQnsnDhwnz2s5/N9773\n",

"vey00071engA0C3XXnttxowZk7Fjx2bcuHGZO3fuFtceccQR2XvvvdPa2prW1tZcffXVPfpeN998\n",

"cxoaGnLHHXf06Osae7QaAHhLO+2009LY2JjGxsa0trZmxYoVOeSQQ3L33XfnyiuvTJLstddemTx5\n",

"cufX3HHHHVm7dm3mz5+fJHn11VfT0tKSJDn88MMzbdq0HHroofn2t7+dUaNGbfPHBABbc8QRR+Tf\n",

"//3fO89dSbL//vvn/vvvz4ABA7Jy5coceOCBOeSQQzJixIjN3sfVV1+dk046qcffu62tLTfddFMO\n",

"PvjgHn+tV+YBgE7veMc7Ov/dt2/fdHR0bHZdQ0ND57+rqsp1112XJUuWZMmSJVm2bFl+9KMfdR5/\n",

"6KGHMnDgwKxcubJ2gwNALzrqqKMyYMCAJMnQoUMzePDgN3Uee/zxx/ORj3wkEyZMyLhx43L99dd3\n",

"Htu0aVPOOeecXHfddWlqaurxfYt5AOANHX300fnmN7+Z5LXfn1+wYEHnsZNOOilXX311XnrppSTJ\n",

"Sy+9lKVLlyZJrr/++qxZsya/+MUvcuONN+b+++/f9sMDwF/grrvuypo1azJhwoQtrrnkkksyduzY\n",

"nHbaaXniiSeSJBs3bsxf//Vf52tf+1oWLVqUn//855k9e3YWLVqUJLnqqqty2GGHZfz48W9qLm+z\n",

"BwDe0DXXXJOpU6dm9OjR2WuvvXLkkUd2Hrv44ouzfv36vO997+t8xf5Pt1155ZX57//+7+yxxx6Z\n",

"O3duzjjjjCxatCi77bZbvR4KAOTMM8/Mww8/nCRZvnx5jj/++Oy4445JXvv1sT+95f6Xv/xlzjrr\n",

"rNx2223p16/fZu/rlltuydChQ1NVVW644YaccMIJWbZsWR577LEsXbo0p59+eufaP/7xj1m2bFl2\n",

"2mmnzJ8/P/fee++bfgwNVVVVb/qrAQAAoGCb+535JFm2bFmOO+64/Nu//Vs+9KEPdfv+3vGOd+Sp\n",

"p57K6tWr8+EPfzhPPfXU69b867/+a7785S93vr1+9erV6d+/fy677LJ86lOf6tb38TZ7AAAA+DOP\n",

"PPJIjj/++MyePXurId/R0ZFnnnmm8/r8+fMzaNCg7Lbbbtl3333Tv3//3HzzzZ3Hly9fnj/84Q/5\n",

"1Kc+laeffjptbW1pa2vLwQcfnNmzZ3c75BMxDwAAAF2cf/75Wbt2bS6++OLOPzn34x//OEny4IMP\n",

"5vjjj0+SrF+/Ph/5yEcyduzYHHDAAfnGN77R+bkyjY2NufPOO3P77bdn3Lhx2X///TNt2rS8/PLL\n",

"vTKjt9kDAABAYbwyDwAAAIUR8wAAAFAYMQ8AAACFEfMAAABQGDEPAAAAhRHzAAAAUBgxDwAAAIUR\n",

"8wAAAFAYMQ8AAACFEfMAAABQmP8LZ6HyfCTW6X0AAAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-4cc553db-6325-4a28-a0df-a42c69010e8b\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-4cc553db-6325-4a28-a0df-a42c69010e8b\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x7867130f7c70>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">Values</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_19['Index'].plot(kind='line', figsize=(8, 4), title='Index')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-3a914761-8e69-4194-9a3e-030fcce0f4ff\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAABFkklEQVR4nO3deViVdf7/8RebxyVBxQWUHQ6WuKCGSm4o1ncyx6nMaWpMKS21\n",

"DPg6c7VcV34nZ9GZa37jhJqaabZYpmmZU0414L6UmmSWluewCOKCogIu7Pfvj4MoIxjmgQOc5+O6\n",

"ui65z4dz3udz3eKz+xzAxTAMQwAAAICDuDp6AAAAADg3ghQAAAAORZACAADAoQhSAAAAOBRBCgAA\n",

"AIciSAEAAOBQBCkAAAAciiAFAACAQxGkAAAAcCiCFAAaiQkTJiguLs7RYwBAgyNIAcBOYmJi9NJL\n",

"Lzl6DABocghSAAAAOBRBCgD1ICgoSH/84x81evRotW3bVqGhofroo4+qrfn73/+ugIAAtWvXTlOm\n",

"TFFJSUm128+fP6/p06crMDBQ3t7eGj16tNLT0yVJhw8flqenpz7++OOq9dOnT9edd96p4uLi+n+C\n",

"AGBHBCkA1JNly5bpz3/+s/Lz8/XMM89o0qRJKigokCS99957mjNnjt5//32dPn1aAwYMqBashmHo\n",

"gQceUEFBgVJTU3X8+HH16tVLY8aMUWlpqe644w4tX75ckyZNktVq1TvvvKM1a9Zo7dq1MplMjnrK\n",

"APCzEKQAUE+mTJmifv36ydXVVVOnTlVhYaEOHz4sSVqxYoWeeOIJ3XXXXfLw8NBTTz2l3r17V31u\n",

"amqqdu7cqddee00dOnSQyWTSnDlzlJGRoa+++kqSNH78eE2ePFljxozR008/rZUrVyooKMgRTxUA\n",

"bkmzD9L58+erZ8+e6tWrl3r37q2VK1fWujYmJkbBwcGKjIxUZGSk/vnPf97UY61YsUIuLi5av379\n",

"LU4NoDno2rVr1Z/btGkjSSosLJQkHTt2TMHBwdXWX/uxxWJRWVmZ/Pz81K5dO7Vr107e3t6SpOzs\n",

"7Kp1CQkJslqt6tWrl+699956ey4AUJ/cHT2APcXExOjNN9+sdoUgIiJCO3fulJeXl7Kzs9W3b19F\n",

"R0crNDS0xvv45z//qfvvv/+mHzszM1Ovv/66Bg0a9DOnB+BM/Pz8lJmZWe1YZmamevbsKUny8fFR\n",

"ixYtdPr0aXl4eNR4H6WlpXrkkUc0btw4bd++XQsXLtSMGTPqe3QAsLtmf4U0NjZWXl5ekiR/f3/5\n",

"+PhUu7pQVxaLRffdd5+ioqLUu3dvLVy4sOq2iooKTZkyRQsWLOC9WwDqZNKkSXrjjTf05Zdfqqys\n",

"TMuWLdOBAweqbh8yZIh69uyp6dOnKzc3V5J07tw5rVu3TpcuXZIk/f73v9fly5f11ltvafXq1Xr+\n",

"+eerXs4HgKak2QfptZKTk3Xu3DlFRUXVuuaFF15Qr1699PDDD1d9N2t5ebkeeeQR/eMf/9DevXv1\n",

"5ZdfaunSpdq7d68kad68eRo8eLD69+/fIM8DQNP329/+Vs8995zGjx+vjh076ssvv9QDDzxQdbub\n",

"m5v+85//qHXr1ho4cKDatm2rPn366KOPPpKLi4vef/99rVy5UuvWrVPLli01dOhQ/fGPf9RDDz2k\n",

"06dPO/CZAcDNczEMw3D0ELdi4sSJ+vbbbyVJVqtVAQEBatGihSRp/fr1VS/fHzx4UKNHj9aqVas0\n",

"ZMiQGu8rOztb/v7+MgxDr776qhYtWqRDhw7p0KFD6t+/v7p37161Nj8/Xy+//LL69++vJ598Utu2\n",

"bZOHh4diYmKUmJj4s172BwAAcEZNPkivVdN7SCXp0KFDuvfee7Vs2TLdfffddb6/li1bKicnRydP\n",

"ntQ999yjnJyc69YsXrxYf/zjH6teqj958qQ8PT01e/ZsTZ8+/ZaeDwAAgDNo9i/ZHz58WKNHj9bS\n",

"pUtvGKNlZWU6depU1cfr1q1Tly5d5O3tre7du8vT01MrVqyout1qters2bOaPn26Tpw4oczMTGVm\n",

"ZmrQoEFaunQpMQoAAFBHzT5I4+PjlZ+fr+eff77qxzl9/vnnkqR9+/Zp9OjRkqTi4mLdd9996tWr\n",

"l/r06aNFixZpw4YNkiR3d3d98skn+vDDD9W7d29FRERo8uTJunz5ssOeFwAAQHPRrF6yBwAAQNPT\n",

"7K+QAgAAoHEjSAEAAOBQBCkAAAAcqkkHaVJSkqNHAAAAwC1q0kF69OhRR48AAACAW9SkgxQAAABN\n",

"H0EKAAAAhyJIAQAA4FAEKQAAAByKIAUAAIBDEaQAAABwKIIUAAAADkWQAgAAwKHqJUgtFovuuusu\n",

"hYeHKyoqSt9//32N65YvXy6z2azQ0FA9+eSTKi0trY9xAAAA0IjVS5BOnTpVTz31lI4cOaLnn39e\n",

"cXFx163JyMjQrFmztH37dlmtVp06dUpLly6tj3EAAADQiNk9SHNzc7Vv3z5NmDBBkjRu3DhlZ2fL\n",

"arVWW7d27VqNHTtWPj4+cnFx0bRp07Rq1Sp7jwMAAIBKF4rLVFjU+F6RtnuQZmdny9fXV+7u7pIk\n",

"FxcXBQQEKCsrq9q6rKwsBQYGVn0cFBR03ZprFRcXq6CgoNp/5eXl9h4fAACg2SksKtWrm60a8rdN\n",

"WrQlzdHjXKfJfFPT3Llz5eXlVe2/PXv2OHosAACARquwqFQLUiwa8rfN+vvnP+r8pVLtsJxRRYXh\n",

"6NGqcbf3Hfr7++vEiRMqKyuTu7u7DMNQVlaWAgICqq0LCAhQWtrVQs/MzLxuzbVefPFFzZw5s9qx\n",

"WbNm2Xd4AACAZqCgqFRv7szU8h0Zyr9se4k+pFMbxY8065d9usrV1cXBE1Zn9yDt3Lmz+vXrp5Ur\n",

"VyouLk7r1q2Tn5+fwsLCqq0bN26chgwZopdfflldunTRkiVL9Jvf/KbW+zWZTDKZTNWOubm52Xt8\n",

"AACAJiv/cqlW7MzQGzsyVFBUJkkK7dRG8bFmjendVW6NLESvsHuQStJrr72muLg4zZkzR56enlqx\n",

"YoUkacqUKRo7dqzGjh2rkJAQzZ49W4MHD5YkxcTEaOrUqfUxDgAAQLOWf6lUy3dmaMXODBVWhqi5\n",

"8216Ntas+3r5NtoQvcLFMIzG9SaCmzBz5kzNmzfP0WMAAAA4xPlLJXpjR4ZW7MxUYbEtRMO73Kb4\n",

"WLNG9/RtdC/N16ZerpACAACg/py7WKLlOzL05q5MXagM0e5d2io+1qx7e/o0mRC9giAFAABoIs5e\n",

"LNGy7el6a1emLpbYfvzl7T5tlRBr1v9ENL0QvYIgBQAAaOTOXizR69vT9fY1IXqHr6cSYs26p0eX\n",

"JhuiVxCkAAAAjVTehWIt3Z6ud3Yf1aXKEI3o6qn4WLPuvqPph+gVBCkAAEAjc+ZCsZZus4Xo5VJb\n",

"iPbs5qmE2HCNuqOzXFyaR4heQZACAAA0EqcLi7V0W5pWfplVFaK9unkpcZRZI29vfiF6BUEKAADg\n",

"YLmFRXpta7re/eqoikorJEl9/LyUMMqsEd2bb4heQZACAAA4SG5BkRZvTdN7X2WpuMwWopH+7ZQw\n",

"yqyY8E7NPkSvIEgBAAAa2KmCIi3ekqZVe66GaN+AdkocFa5h5o5OE6JXEKQAAAAN5GR+kRZvsWrV\n",

"3myVVIZo/8D2Sog1a6gThugVBCkAAEA9O37+shZvSdPqvdkqKbeFaFRQeyXEhmtwmLfThugVBCkA\n",

"AEA9OX7+shZtsWrN3mNVITogqIMSR5kVHUqIXkGQAgAA2Nmxc5e0aEuaPtiXrdJyQ5I0MLiDEkaZ\n",

"FR1CiP43ghQAAMBOss/aQnTt11dDNDrEWwmjzBoU4u3g6RovghQAAOAWZZ+9pFc3W7X262Mqq7CF\n",

"6F2h3kqINWsgIfqTCFIAAICfKSvvkhZutujD/TlVITokrKMSRpkVFdTBwdM1HQQpAADATTqad1EL\n",

"N1n1YWqOyitDdKi5oxJHmdU/kBC9WQQpAABAHWWeuagFm6xa/83VEB0W3kkJsWb1D2zv4OmaLoIU\n",

"AADgJ6SfvqCFlSFa2aGK6d5J8bFm9QsgRG8VQQoAAFCLtMoQ/fiaEB15e2fFx5oV6d/OobM1JwQp\n",

"AADAf7HmFmrBJqv+deB4VYjGVoZoH0LU7ghSAACASpZThZq/yapPvj0uozJER93RRQmxZvXy83Ls\n",

"cM0YQQoAAJzekVOFmp9i0acHT1SF6D09uig+1qye3QjR+kaQAgAAp/XDyQItSLFq43dXQ/R/Imwh\n",

"GtGVEG0oBCkAAHA6h08UaH6KRf/+7mTVsXt7+ujZkWb16OrpwMmcE0EKAACcxqHjthD97PurIXpf\n",

"L189Gxum230IUUexa5BWVFQoISFBGzdulIuLixITEzVjxowa1wYFBclkMqlVq1aSpBdffFEPP/yw\n",

"PccBAACQJH2Xk6/5KRZ9ceiUJMnFRRrdy1fxI83q7tPWwdPBrkG6cuVKHTp0SEeOHFF+fr769u2r\n",

"ESNGKCIiosb1q1evVmRkpD1HAAAAqPJdTr5eSbYo+fDVEB3Tu6ueHRmm8C6EaGNh1yBdvXq1nnzy\n",

"Sbm5ualDhw56+OGHtWrVKv35z3+258MAAADc0MFj+UpKOaLkw7mSbCE6to8tRMM6E6KNjV2DNCsr\n",

"S4GBgVUfBwUF6csvv6x1/cSJE2UYhgYMGKC//vWv6tSpU61ri4uLVVxcXO1YeXn5rQ8NAACajQPZ\n",

"55WUYtGmH2wh6loZojNGmhXW+TYHT4fa3FSQRkdHy2Kx1HhbamrqTT3wtm3bFBAQoNLSUr300kua\n",

"NGmSNm7cWOv6uXPnavbs2dWODRo06KYeEwAANE+pWeeUlGLRlh9PS7KF6P2R3fTMyDCFdiJEG7ub\n",

"CtLdu3ff8PaAgAAdPXpU0dHRkqTMzEwFBATUulaSPDw8lJiYqPDw8Bve94svvqiZM2dWOzZr1qy6\n",

"jg4AAJqh/VnnlJRs0dYjthB1c3XR/ZHdNGNkmII7tnHwdKgru75kP378eL3++usaP3688vPztXr1\n",

"an3yySfXrbt48aJKS0vVrl07SdKqVavUt2/fG963yWSSyWSqdszNzc1uswMAgKbj66Nn9UqyRdst\n",

"ZyTZQvSBvt00Y0SYggjRJseuQfrYY49p7969MpvNcnFx0cyZM9WrVy9J0oYNG7RhwwYtW7ZMp06d\n",

"0rhx41ReXi7DMBQSEqK3337bnqMAAIBmaG/mWSUlW7TDejVEx/XrpmdGhCnQmxBtqlwM48ovymp6\n",

"Zs6cqXnz5jl6DAAAUM/2ZJxVUsoR7bTmSZLcXV30UH8/PTMiTP4dWjt4OtwqflMTAABotL5Mz1NS\n",

"skW706+G6Pg7/fR0DCHanBCkAACg0dmdlqdXko/oq4yzkiQPNxeNv9NfT8eEyq89IdrcEKQAAKBR\n",

"MAzDFqIpFu25JkQfjvLX9JgwdWvXysETor4QpAAAwKEMw9BOa56SUo5ob+Y5SVILN9fKEA1VV0K0\n",

"2SNIAQCAQxiGoR3WM3ol2aKvj1aGqLurHony17SYUPl6EaLOgiAFAAANyjAMbbOcUVLyEe3POi/J\n",

"FqKPDgjQtOGh8vFq6dgB0eAIUgAA0CAMw9CWI6eVlGzRN9nnJUkmd1c9OtAWol08CVFnRZACAIB6\n",

"ZRiGtvx4Wq+kWHSgMkRberjqtwMDNXVYiDoTok6PIAUAAPXCMAxt+iFXSSkWfXssX5ItRCcMDNRT\n",

"w0PUuS0hChuCFAAA2JVhGEo+nKv5KRYdzLGFaCsPNz0WHagnh4aoU1uTgydEY0OQAgAAuzAMQ/85\n",

"dEpJKRZ9f7xAktS6xdUQ7XgbIYqaEaQAAOCWVFQY+uLQKc1PsejQiashOjE6SE8ODZY3IYqfQJAC\n",

"AICfpaLC0Offn1RSikU/nCyUJLVp4aZJdwVpytAQdWjTwsEToqkgSAEAwE2pqDD02fcnNf+aEL3N\n",

"5K64u4I0eUiw2hOiuEkEKQAAqJOKCkMbvzuhBSlW/XjKFqJtTe6KG2wL0XatCVH8PAQpAAC4ofIK\n",

"Q58ePKEFKRZZci9IsoXo40OCNXlwsLxaezh4QjR1BCkAAKhReYWhT749rgWbrLJeCdGW7npicLCe\n",

"IERhRwQpAACoprzC0L8OHNeCTRalnb4oSfJs6a7JQ0IUNzhIXq0IUdgXQQoAACRJZeUV2nDguBZu\n",

"sir9jC1EvVp5aMqQYE0aHCTPloQo6gdBCgCAkysrr9DH3xzXws1WZVSGaLvWlSF6V5DaEqKoZwQp\n",

"AABOqqy8Qh+l5ujVzVZl5l2SJLVv7aEpQ0M06a4g3WYiE9AwONMAAHAypeUV+mh/jhZutirrrC1E\n",

"O7RpoSeHhuix6EBCFA2OMw4AACdRWl6hD/cf08LNVmWfvSxJ8m7TQk8OC9FjgwLVhhCFg3DmAQDQ\n",

"zJWUVWjd/mN6dbNVx87ZQrTjbS301LAQTRgUqNYtyAE4FmcgAADNVElZhT74OluLNqcp5/yVEDVp\n",

"2vAQ/XZgoFq1cHPwhIANQQoAQDNTXFauD/Yd06LNVh3PL5IkdWpr0tRhhCgaJ1d73tmnn36q/v37\n",

"y2QyKTEx8YZrLRaL7rrrLoWHhysqKkrff/+9PUcBAMDpFJeV653dmYr5+xa9tP47Hc8vUue2Jv3f\n",

"mB7a/twITRkaQoyiUbLrFVKz2aw33nhDH3zwgS5cuHDDtVOnTtVTTz2luLg4rV27VnFxcdq7d689\n",

"xwEAwCkUlZZr9d5sLd6SppMFtiuiXTxNmj48VL8ZEKCWHkQoGje7Bml4eLgk6aOPPrrhutzcXO3b\n",

"t09ffPGFJGncuHGaMWOGrFarwsLC7DkSAADNVlFpud7fk6XFW9N0qqBYkuTj2VLTY0L1cJQ/IYom\n",

"wyHvIc3Ozpavr6/c3W0P7+LiooCAAGVlZdUapMXFxSouLq52rLy8vN5nBQCgsSkqLdd7X2VpydY0\n",

"5Rba/m309Wqpp2NC9esof5ncCVE0LTcVpNHR0bJYLDXelpqaKn9/f7sMVZO5c+dq9uzZ1Y4NGjSo\n",

"3h4PAIDG5nJJud796qhe25au05Uh2tWrpZ4eEabxd/oRomiybipId+/ebZcH9ff314kTJ1RWViZ3\n",

"d3cZhqGsrCwFBATU+jkvvviiZs6cWe3YrFmz7DIPAACN2ZUQXbI1XWcu2EK0W7tWenpEqB7qT4ii\n",

"6XPIS/adO3dWv379tHLlSsXFxWndunXy8/O74ftHTSaTTCZTtWNubvwFBAA0X5dKyrTyy6Naui1d\n",

"Zy6USJL82rfSMyPCNK6fn1q42/WH5QAOY9cgTUlJ0aRJk1RQUCDDMLR27VotWrRIY8eO1YYNG7Rh\n",

"wwYtW7ZMkvTaa68pLi5Oc+bMkaenp1asWGHPUQAAaLIulZTpnd22EM27eDVEnx0Zpgf7+cnDjRBF\n",

"8+JiGIbh6CF+rpkzZ2revHmOHgMAALu4WFymt3cf1evb03W2MkQDOrTWjBFheqBfN0IUzRa/qQkA\n",

"AAe7UFymt3Zlatn2dJ27VCpJCvS2hej9fQlRNH8EKQAADlJYVFp1RfR8ZYgGebfWsyPN+lVkV7kT\n",

"onASBCkAAA2soKhUb+3M1LIdGcq/bAvRkI5tNGNkmMb2IUThfAhSAAAaSEFRqVbsyNTyHekqKCqT\n",

"JIV0aqP4kWb9sk9Xubm6OHhCwDEIUgAA6ln+5VKt2JmhN3ZkVIVoaKc2io81a0xvQhQgSAEAqCf5\n",

"l0q1fGeGVuzMUGFliJo736ZnY826r5cvIQpUIkgBALCz85dKtHxHht7cmanCYluIhne5TfGxZo3u\n",

"6StXQhSohiAFAMBOzl2sDNFdmbpQGaLdu7RVwiizfhHhQ4gCtSBIAQC4RWcvlmjZ9nS9tStTF0vK\n",

"JUm3+7RVQqxZ/0OIAj+JIAUA4GfKu1Cs17dn6O3dmbpUGaI9fD0VH2vWPT26EKJAHRGkAADcpLwL\n",

"xVq6PV3v7D5aFaIRXT2VEGvW3T26yMWFEAVuBkEKAEAdnblQrKXbbCF6udQWoj27eSohNlyj7uhM\n",

"iAI/E0EKAMBPyC0s0tKt6Vr51VEVlVZIknr7eSkh1qyRtxOiwK0iSAEAqEVuYZFe25qud68J0T5+\n",

"XkocFa6Y7p0IUcBOCFIAAP5LbkGRFm9N03tfZam4zBaikf7tlDDKrJhwQhSwN4IUAIBKJ/OLtGRr\n",

"mt7bk6WSyhDtF9BOCaPCNczckRAF6glBCgBweifzi7R4i1Wr9mZXhWj/wPZKHGXWkDBCFKhvBCkA\n",

"wGkdP39Zi7ekafXebJWU20I0Kqi9EmLDNTjMmxAFGghBCgBwOjnnL2vxFqvW7D1WFaIDgjsoMdas\n",

"6FBCFGhoBCkAwGkcO3dJi7ak6YN92SotNyRJA4M7KHFUuKJDvR08HeC8CFIAQLOXfdYWomu/vhqi\n",

"0SHeShhl1qAQQhRwNIIUANBsZZ+9pFc3W7X262Mqq7CF6OAwbyXEhmtAcAcHTwfgCoIUANDsZOVd\n",

"0sLNFn24P6cqRIeEdVTCKLOigghRoLEhSAEAzcbRvItauMmqD1NzVF4ZokPNHZU4yqz+gYQo0FgR\n",

"pACAJi/jjC1E139zNUSHh3dSfKxZ/QPbO3g6AD+FIAUANFnppy9UhWhlhyqmeyclxJrVN4AQBZoK\n",

"V3ve2aeffqr+/fvLZDIpMTHxhmuDgoLUvXt3RUZGKjIyUqtXr7bnKACAZizt9AX97+pvNGreVn2Y\n",

"aovRkbd31vpnBuvNxwcQo0ATY9crpGazWW+88YY++OADXbhw4SfXr169WpGRkfYcAQDQjFlzC7Vg\n",

"k1X/OnC86oroqDs6Kz7WrN5+7Rw6G4Cfz65BGh4eLkn66KOP7Hm3AAAnZzlVqPmbrPrk2+MyqkK0\n",

"ixJizerl5+XY4QDcMoe+h3TixIkyDEMDBgzQX//6V3Xq1KnWtcXFxSouLq52rLy8vL5HBAA40JFT\n",

"hZqfYtGnB09Uheg9PbooPtasnt0IUaC5uKkgjY6OlsViqfG21NRU+fv71/m+tm3bpoCAAJWWluql\n",

"l17SpEmTtHHjxlrXz507V7Nnz652bNCgQXV+PABA0/HDyQItSLFq43dXQ/QXET56NjZMEV0JUaC5\n",

"cTGMK3/V7efll1/W+fPn9corr9Rp/YkTJxQeHq7CwsJa19R0hXTWrFlKSkq6lVEBAI3I4RMFmp9i\n",

"0b+/O1l17N6ePoqPNesOX08HTgagPjnkJfuLFy+qtLRU7dq1kyStWrVKffv2veHnmEwmmUymasfc\n",

"3Nzqa0QAQAM6dNwWop99fzVE7+vlq2djw3S7DyEKNHd2DdKUlBRNmjRJBQUFMgxDa9eu1aJFizR2\n",

"7Fht2LBBGzZs0LJly3Tq1CmNGzdO5eXlMgxDISEhevvtt+05CgCgCfguJ1/zUyz64tApSZKLizS6\n",

"l6/iR5rV3aetg6cD0FDq5SX7hjJz5kzNmzfP0WMAAG7Sdzn5eiXZouTDV0N0TO+uih8ZJnMXQhRw\n",

"NvymJgBAgzl4LF9JKUeUfDhXki1Ex/bpqmdHhimsMyEKOCuCFABQ7w5kn1dSikWbfrCFqGtliM4Y\n",

"aVZY59scPB0ARyNIAQD1JjXrnJJSLNry42lJthC9P7KbZowMU0gnQhSADUEKALC7/VnnlJRs0dYj\n",

"thB1c3WpCtHgjm0cPB2AxoYgBQDYzddHz+qVZIu2W85IsoXoA327acaIMAURogBqQZACAG7Z3syz\n",

"Skq2aIf1aoiO69dNz4wIU6A3IQrgxghSAMDPtifjrJJSjminNU+S5O7qoof6++mZEWHy79DawdMB\n",

"aCoIUgDATfsyPU9JyRbtTr8aouPv9NPTMYQogJtHkAIA6mx3Wp5eST6irzLOSpI83Fw0/k5/PR0T\n",

"Kr/2hCiAn4cgBQDckGEYthBNsWjPNSH6cJS/pseEqVu7Vg6eEEBTR5ACAGpkGIZ2VV4R3Zt5TpLU\n",

"ws21MkRD1ZUQBWAnBCkAoBrDMLTDekZJyRbtO1oZou6ueiTKX9NiQuXrRYgCsC+CFAAgyRai2yxn\n",

"lJR8RPuzzkuyheijAwI0bXiofLxaOnZAAM0WQQoATs4wDG09clqvJFv0TfZ5SZLJ3VWPDrSFaBdP\n",

"QhRA/SJIAcBJGYahLT+e1ispFh2oDNGWHq767cBATR0Wos6EKIAGQpACgJMxDEObfshVUopF3x7L\n",

"l2QL0QkDA/XU8BB1bkuIAmhYBCkAOAnDMJRy2BaiB3NsIdrKw02PRQfqyaEh6tTW5OAJATgrghQA\n",

"mjnDMPSfQ6c0f5NF3+UUSJJat7gaoh1vI0QBOBZBCgDNVEWFoS8OndL8FIsOnbgaohOjg/Tk0GB5\n",

"E6IAGgmCFACaGVuIntQryRb9cLJQktSmhZsm3RWkKUND1KFNCwdPCADVEaQA0ExUVBj67PuTmp9y\n",

"NURvM7kr7q4gTR4SrPaEKIBGiiAFgCauosLQxu9OaEGKVT+esoVoW5O74gbbQrRda0IUQONGkAJA\n",

"E1VeYWjjwROan2KRJfeCJKltS3c9PjhYkwcHy6u1h4MnBIC6IUgBoIkprzD0ybfHtWCTVdZrQnTy\n",

"kGA9PjhYXq0IUQBNC0EKAE1EeYWhfx04rgWbLEo7fVGS5NnSXZOHhChucBAhCqDJIkgBoJErK6/Q\n",

"v749rgUpVqWfsYWoVysPTRkSrEmDg+TZkhAF0LTZNUjnz5+vpUuXysXFRS4uLnruuec0YcKEGtfm\n",

"5uZq4sSJSktLk8lk0qJFizRs2DB7jgMATVpZeYU+/ua4Fm62KqMyRNu19tCTQ0M0MTpQbQlRAM2E\n",

"XYM0IiJCO3fulJeXl7Kzs9W3b19FR0crNDT0urUvvPCCBg0apM8++0x79+7VAw88oIyMDHl48AUW\n",

"gHMrK6/QR6k5enWzVZl5lyRJ7Vt7aMrQEE26K0i3mXhxC0DzYtevarGxsVV/9vf3l4+Pj7Kzs2sM\n",

"0jVr1shqtUqSoqKi1LVrV23dulWjRo2y50gA0GSUVobowk1WZZ21hWiHNi305NAQPRYdSIgCaLbq\n",

"7atbcnKyzp07p6ioqOtuy8vLU2lpqXx8fKqOBQUFKSsrq9b7Ky4uVnFxcbVj5eXl9hsYAByktLxC\n",

"H+4/plc3p1WFqHebFnpqWIgmDApUG0IUQDN3U1/loqOjZbFYarwtNTVV/v7+kqSDBw/q8ccf1+rV\n",

"q9WmTZtbn1LS3LlzNXv27GrHBg0aZJf7BgBHKCmr0Lr9x/TqZquOnbssSep429UQbd2CEAXgHG7q\n",

"q93u3bt/cs2hQ4c0ZswYvfHGGxoyZEiNa7y9veXu7q6TJ09WXSXNzMxUQEBArff74osvaubMmdWO\n",

"zZo16yamB4DGoaSsQmu/toVozvkrIWrStOEhenRgACEKwOnY9ave4cOHNXr0aC1dulR33333DdeO\n",

"Hz9eS5Ys0csvv6y9e/cqJydHw4cPr3W9yWSSyWSqdszNzc0ucwNAQyguK9cH+45p8Za0qhDt1Nak\n",

"acND9eiAALVqwdc0AM7J1Z53Fh8fr/z8fD3//POKjIxUZGSkPv/8c0nSvn37NHr06Kq1f/vb37Rr\n",

"1y6ZzWbFxcVp5cqVfIc9gGapuKxc73x5VCP+vkUvrf9OOecvq3Nbk/5vTA9tf26EJg8JJkYBODUX\n",

"wzAMRw/xc82cOVPz5s1z9BgAUKOi0nKt2ZetxVvSdCK/SJLUxdOk6cND9ZsBAWrpQYQCgMRvagIA\n",

"uysqLdf7e7K0eGuaThXYfjqIj2dLPT0iVL++058QBYD/QpACgJ0UlZZr1Z4sLbkmRH29WurpmFD9\n",

"OspfJndCFABqQpACwC0qKi3Xu1/ZQvR0oS1Eu3q11NMjwjT+Tj9CFAB+AkEKAD/T5ZJyvfvVUS3Z\n",

"mq4zF2wh2q1dKz0zIkwP9fdTC3e7ft8oADRbBCkA3KRLJWV698ssvbYtTWculEiS/NrbQnRcP0IU\n",

"AG4WQQoAdXSppEzv7D6qpdvSlXfRFqL+HVppxogwPdjPTx5uhCgA/BwEKQD8hIvFZXp791G9vj1d\n",

"ZytDNKBDa80YGaYH+nYjRAHgFhGkAFCLC8Vlent3pl7flq5zl0olSYHerTVjRJjuJ0QBwG4IUgD4\n",

"L4VFpVVXRM9XhmhwxzaaMSJMv4rsKndCFADsiiAFgEqFRaV6c2emlu3IUP5lW4iGdGyjZ2PD9Mve\n",

"hCgA1BeCFIDTK6gM0eXXhminNoofadYv+3SVm6uLgycEgOaNIAXgtPIvl2rFzgy9sSNDBUVlkqSw\n",

"zrfp2ZFhGtObEAWAhkKQAnA6+ZdKtXxnhlbszFBhZYiaO9+m+FizRvfyJUQBoIERpACcxvlLJXpj\n",

"R4ZW7MxUYbEtRMO7VIZoT1+5EqIA4BAEKYBm79zFEi3fkaE3d2XqQmWI3u7TVvGxZv0iwocQBQAH\n",

"I0gBNFtnL5Zo2fZ0vbUrUxdLyiXZQjRxlFn39CBEAaCxIEgBNDtnL5bo9e3pevuaEO3h66n4WLPu\n",

"6dGFEAWARoYgBdBs5F0o1tLt6Xpn91FdqgzRiK6eSog16+4eXeTiQogCQGNEkAJo8s5cKNbr29L1\n",

"9u6julxqC9Ge3TyVGBuu2Ds6E6IA0MgRpACarNOFxVq6LU0rv8yqCtHefl5KiDVr5O2EKAA0FQQp\n",

"gCYnt7BIr21N17tfHVVRaYUkqY9/OyXGmhXTvRMhCgBNDEEKoMnILSjSksoQLS6zhWikfzsljjJr\n",

"eDghCgBNFUEKoNE7VVCkxVvStGpPVlWI9gtop4RR4Rpm7kiIAkATR5ACaLRO5hdp8RarVu3NVkll\n",

"iN4Z2F4Jo8waEkaIAkBzQZACaHRO5F/W4i1pen9PtkrKbSEaFdReiaPCdVeoNyEKAM0MQQqg0Th+\n",

"/rIWbbFqzd5jVSE6ILiDEmPNiiZEAaDZsmuQzp8/X0uXLpWLi4tcXFz03HPPacKECTWujYmJ0dGj\n",

"R+Xl5SVJmjRpkv73f//XnuMAaCJyzl/Wos1WrdmXrdJyQ5I0MLiDEkeFKzrU28HTAQDqm12DNCIi\n",

"Qjt37pSXl5eys7PVt29fRUdHKzQ0tMb1//znP3X//ffbcwQATUj22UtatCVNa7++GqLRId5KGGXW\n",

"oBBCFACchV2DNDY2turP/v7+8vHxUXZ2dq1BCsA5ZZ+9pFc3W7X262Mqq7CF6OAwbyXEhmtAcAcH\n",

"TwcAaGj19h7S5ORknTt3TlFRUbWueeGFFzRr1iz16NFDc+fOVUhISK1ri4uLVVxcXO1YeXm53eYF\n",

"UP+y8mwhum7/1RAdEtZRCaPMigoiRAHAWd1UkEZHR8tisdR4W2pqqvz9/SVJBw8e1OOPP67Vq1er\n",

"TZs2Na5/55135O/vL8Mw9Oqrr2rMmDE6dOhQrY89d+5czZ49u9qxQYMG3cz4ABzkaN5FLdxk1Yep\n",

"OSqvDNGh5o5KHGVW/0BCFACcnYthGIY97/DQoUO69957tWzZMt199911/ryWLVsqJydH3t41v2+s\n",

"piuks2bNUlJS0i3NC6D+ZJ65qAWbrFr/zdUQHR7eSfGxZvUPbO/g6QAAjYVdX7I/fPiwRo8eraVL\n",

"l94wRsvKypSXl6cuXbpIktatW6cuXbrUGqOSZDKZZDKZqh1zc3Ozz+AA7CrjzEUt2GTR+tQcVXao\n",

"Yrp3UkKsWX0DCFEAQHV2DdL4+Hjl5+fr+eef1/PPPy9J+tvf/qb/+Z//0b59+/R///d/2rhxo4qL\n",

"i3XfffepuLhYrq6u6tixozZs2GDPUQA4QNrpC1q4yaqPv7kaoiNv76z4WLMi/ds5dDYAQONl95fs\n",

"G9LMmTM1b948R48BOD1r7gUt2GTRvw4crwrRUXfYQrS3XzuHzgYAaPz4TU0AfjZrbqHmp1j1r2+P\n",

"y6gK0S5KiDWrl5+XY4cDADQZBCmAm3bkVKHmp1j06cETVSF6T48uio81q2c3QhQAcHMIUgB19uNJ\n",

"W4hu/O5qiP4iwkfPxoYpoishCgD4eQhSAD/ph5MFthA9eLLq2L09fRQfa9Ydvp4OnAwA0BwQpABq\n",

"dei4LUQ/+94Woi4u0uievno2Nky3+xCiAAD7IEgBXOe7nHzNT7Hoi0OnJNlC9L5evoqPNSu8S1sH\n",

"TwcAaG4IUgBVvsvJV1KKRf+5JkTH9O6q+JFhMhOiAIB6QpAC0MFj+UpKOaLkw7mSJFcX6Zd9uurZ\n",

"kWEK60yIAgDqF0EKOLED2eeVlGLRph+uhuivIrtpxsgwhXa6zcHTAQCcBUEKOKFvss8rKfmINv94\n",

"WpItRO+vDNEQQhQA0MAIUsCJ7M86p6Rki7YesYWom6tLVYgGd2zj4OkAAM6KIAWcwNdHz+qVZIu2\n",

"W85IsoXog3276ZkRYQoiRAEADkaQAs3YvsyzSkqpHqLj+tlCNNCbEAUANA4EKdAM7ck4q6SUI9pp\n",

"zZMkubu66KH+fnpmRJj8O7R28HQAAFRHkALNyJfpeUpKtmh3+tUQHX+nv56OCSVEAQCNFkEKNAO7\n",

"0/KUlHJEX6aflSR5uF0NUb/2hCgAoHEjSIEmyjAM7U7P0yvJFu3JsIVoCzdX/TrKT9NjwtStXSsH\n",

"TwgAQN0QpEATYxiGdqXZXprfk3k1RB+O8tf0mFB1JUQBAE0MQQo0EYZhaIf1jJKSLdp39JwkqYW7\n",

"qx6J8te0mFD5ehGiAICmiSAFGjnDMLTdckavJB/R/qzzkmwh+uiAAE0bHiofr5aOHRAAgFtEkAKN\n",

"lGEY2nrktJJSLEqtDFGTu6seHWgL0S6ehCgAoHkgSIFGxjAMbfnRFqLfZJ+XJLX0cNVvBwZq6rAQ\n",

"dSZEAQDNDEEKNBKGYWjzj7lKSrbowLF8SbYQfWxQoJ4cFqLObQlRAEDzRJACDmYYhlIO52r+Jou+\n",

"rQzRVh5ueiw6UE8ODVGntiYHTwgAQP0iSAEHMQxD/zl0SvM3WfRdToEkqXWLqyHa8TZCFADgHAhS\n",

"oIEZhqEvDp1SUrJFh07YQrRNCzdNvCtIU4YEy5sQBQA4GbsG6auvvqolS5bIzc1NZWVleuqppxQf\n",

"H1/jWovFokmTJunMmTPy8vLSm2++qYiICHuOAzQqFRWGvjh0UkkpVh2+JkQn3RWkKUND1KFNCwdP\n",

"CACAY9g1SCdMmKBnnnlGklRQUKCePXtq6NCh6tu373Vrp06dqqeeekpxcXFau3at4uLitHfvXnuO\n",

"AzQKFRWGPvv+pOanWPTDyUJJ0m0md8XdFaTJQ4LVnhAFADg5uwapl5dX1Z8vXryo0tLSGtfl5uZq\n",

"3759+uKLLyRJ48aN04wZM2S1WhUWFmbPkQCHqagw9O/vbCH64ylbiLY1uevxwUF6Ykiw2rUmRAEA\n",

"kOrhPaRr167VH/7wB1mtVs2ZM6fGq6PZ2dny9fWVu7vt4V1cXBQQEKCsrKxag7S4uFjFxcXVjpWX\n",

"l9t7fOCWlVcY2njwhBZssujIqQuSpLYt3fX44GBNHhwsr9YeDp4QAIDG5aaCNDo6WhaLpcbbUlNT\n",

"5e/vr4ceekgPPfSQMjMz9cADD2jMmDHq3r37LQ86d+5czZ49u9qxQYMG3fL9AvZSXmHok2+Pa8Em\n",

"q6y5V0N08pBgPT44WF6tCFEAAGriYhiGUV93Pm3aNJnNZv3ud7+rdjw3N1dhYWE6e/as3N3dZRiG\n",

"fH19tWPHjpu6Qjpr1iwlJSXV1/hAnVwJ0fkpFqWdvihJ8mzprslDQhQ3OIgQBQDgJ9j1JftDhw6p\n",

"R48ekqTTp09r06ZNGjdu3HXrOnfurH79+mnlypWKi4vTunXr5Ofnd8P3j5pMJplM1X8cjpubmz3H\n",

"B25KWXmF/lV5RTS9MkS9WnloypBgTRocJM+WhCgAAHVh1yBNSkrS9u3b1aJFCxmGocTERN19992S\n",

"pA0bNmjDhg1atmyZJOm1115TXFyc5syZI09PT61YscKeowD1pqy8Qh9/c1wLN1uVccYWou1ae+jJ\n",

"oSGaGB2otoQoAAA3pV5fsq9vM2fO1Lx58xw9BpxEWXmF1n9zXAs3WZSZd0mS1L61h6YMDdGku4J0\n",

"m4nfMwEAwM/Bv6DATygtr9BHqTl6dbNVRytDtEObFlVXRNsQogAA3BL+JQVqUVpeoQ/3H9Orm9OU\n",

"ddYWot5tWuipYSGaMIgQBQDAXvgXFfgvJWW2EF242apj5y5LkjredjVEW7fgrw0AAPbEv6xApZKy\n",

"Cq39+phe3WxVzvkrIWrStOEh+u3AQLVqwU91AACgPhCkcHrFZeX6YN8xLd6SVhWindqaNG14qB4d\n",

"EECIAgBQzwhSOK3isnKt2XdMizdbdTy/SJLU+UqIDgxQSw9CFACAhkCQwukUlZZrzb5sLd6SphOV\n",

"IdrF06Tpw0P1mwGEKAAADY0ghdMoKi3X+3uytGRruk4W2ELUx7Olnh4Rql/f6U+IAgDgIAQpmr2i\n",

"0nKt2pOlJVvTdKqgWJLk69VST8eE6tdR/jK5E6IAADgSQYpmq6i0XO9+ZQvR04W2EO3q1VJPjwjT\n",

"+Dv9CFEAABoJghTNzuWScr371VEt2ZquMxdsIdqtXSs9MyJMD/X3Uwt3VwdPCAAArkWQotm4VFKm\n",

"d7/M0mvb0nTmQokkya+9LUTH9SNEAQBorAhSNHmXSsr0zu6jWrotXXkXbSHq36GVZowI04P9/OTh\n",

"RogCANCYEaRosi4Wl+nt3Uf1+vZ0na0M0YAOrTVjZJge6NuNEAUAoIkgSNHkXCgu09u7M/X6tnSd\n",

"u1QqSQr0bq0ZI8J0PyEKAECTQ5CiySgsKq26Inq+MkSDO7bRjBFh+lVkV7kTogAANEkEKRq9wqJS\n",

"vbkzU8t2ZCj/si1EQzq20bOxYfplb0IUAICmjiBFo1VQGaLLrw3RTm0UP9KsX/bpKjdXFwdPCAAA\n",

"7IEgRaOTf7lUK3Zm6I0dGSooKpMkhXW+Tc+ODNOY3oQoAADNDUGKRiP/UqmW78zQip0ZKqwMUXPn\n",

"2xQfa9boXr6EKAAAzRRBCoc7f6lEb+zI0IqdmSostoVoeJfKEO3pK1dCFACAZo0ghcOcu1ii5Tsy\n",

"9OauTF2oDNHbfdoqPtasX0T4EKIAADgJghQN7uzFEi3bnq63dmXqYkm5JFuIJo4y654ehCgAAM6G\n",

"IEWDOXuxRK9vT9fb14RoD19PxceadU+PLoQoAABOiiBFvcu7UKyl29P1zu6julQZohFdPZUQa9bd\n",

"PbrIxYUQBQDAmRGkqDdnLhRr6TZbiF4utYVoz26eSowNV+wdnQlRAAAgyc5B+uqrr2rJkiVyc3NT\n",

"WVmZnnrqKcXHx9e4NigoSCaTSa1atZIkvfjii3r44YftOQ4c5HRhsZZuS9PKL7OqQrS3n5cSYs0a\n",

"eTshCgAAqrNrkE6YMEHPPPOMJKmgoEA9e/bU0KFD1bdv3xrXr169WpGRkfYcAQ6UW1ik17am692v\n",

"jqqotEKS1Me/nRJjzYrp3okQBQAANbJrkHp5eVX9+eLFiyotLbXn3aORyi0o0uKtaXrvqywVl9lC\n",

"NNK/nRJHmTU8nBAFAAA3Zvf3kK5du1Z/+MMfZLVaNWfOnFqvjkrSxIkTZRiGBgwYoL/+9a/q1KlT\n",

"rWuLi4tVXFxc7Vh5ebnd5sbNO1VQpMVb0rRqz9UQ7RfQTgmjwjXM3JEQBQAAdeJiGIZR18XR0dGy\n",

"WCw13paamip/f/+qjzMzM/XAAw/o/fffV/fu3a9bn5WVpYCAAJWWluqll17SwYMHtXHjxlof++WX\n",

"X9bs2bOrHRs0aJB2795d1/FhJyfzi7R4i1Wr9marpDJE7wxsr4RRZg0JI0QBAMDNuakgvVnTpk2T\n",

"2WzW7373uxuuO3HihMLDw1VYWFjrmpqukM6aNUtJSUl2mRU/7fj5y1q8JU2r92arpNwWolFB7ZU4\n",

"Klx3hXoTogAA4Gex60v2hw4dUo8ePSRJp0+f1qZNmzRu3Ljr1l15f2m7du0kSatWrbrhS/uSZDKZ\n",

"ZDKZqh1zc3Ozz+C4oZzzl7V4i1Vr9h6rCtEBwR2UGGtWNCEKAABukV2DNCkpSdu3b1eLFi1kGIYS\n",

"ExN19913S5I2bNigDRs2aNmyZTp16pTGjRun8vJyGYahkJAQvf322/YcBXZw7NwlLdqSpg/2Zau0\n",

"3HYhfWBwByWOCld0qLeDpwMAAM1Fvb5kX99mzpypefPmOXqMZif7rC1E1359NUSjQ7yVMMqsQSGE\n",

"KAAAsC9+UxOqZJ+9pFc3W7X262Mqq7CF6OAwbyXEhmtAcAcHTwcAAJorghTKyrukhZst+nB/TlWI\n",

"DgnrqIRRZkUFEaIAAKB+EaRO7GjeRS3cZNWHqTkqrwzRoeaOShxlVv9AQhQAADQMgtQJZZyxhej6\n",

"b66G6PDwToqPNat/YHsHTwcAAJwNQepE0k9fqArRyg5VTPdOSog1q28AIQoAAByDIHUCaZUh+vE1\n",

"ITry9s6KjzUr0r+dQ2cDAAAgSJsxa26hFmyy6l8HjleF6Kg7bCHa26+dQ2cDAAC4giBthiynCjV/\n",

"k1WffHtcRlWIdlFCrFm9/LwcOxwAAMB/IUibkSOnCjU/xaJPD56oCtF7enRRfKxZPbsRogAAoHEi\n",

"SJuBH04WaEGKVRu/uxqiv4jw0bOxYYroSogCAIDGjSBtwg6fKND8FIv+/d3JqmP39vRRfKxZd/h6\n",

"OnAyAACAuiNIm6BDx20h+tn3thB1cZFG9/TVs7Fhut2HEAUAAE0LQdqEfJeTr/kpFn1x6JQkW4je\n",

"18tX8bFmhXdp6+DpAAAAfh6CtAn4LidfryRblHz4aoiO6d1V8SPDZCZEAQBAE0eQNmIHj+UrKeWI\n",

"kg/nSpJcXaRf9umqZ0eGKawzIQoAAJoHgrQROpB9XkkpFm364WqI/iqym2aMDFNop9scPB0AAIB9\n",

"EaSNSGrWOSWlWLTlx9OSbCF6f2WIhhCiAACgmSJIG4Gvj9pCdNsRW4i6ubpUhWhwxzYOng4AAKB+\n",

"EaQO9PXRs3ol2aLtljOSbCH6YN9uemZEmIIIUQAA4CQIUgfYm3lWSckW7bBeDdFx/WwhGuhNiAIA\n",

"AOdCkDagr9LzlJRi0a60PEmSu6uLHurvp2dGhMm/Q2sHTwcAAOAYBGkD+DI9T0nJFu1Ovxqi4+/0\n",

"19MxoYQoAABwegRpPdqdlqdXko/oq4yzkiQPt6sh6teeEAUAAJAIUrszDMMWoikW7akM0RZurvp1\n",

"lJ+mx4SpW7tWDp4QAACgcSFI7cQwDO205ikp5Yj2Zp6TZAvRh6P8NT0mVF0JUQAAgBoRpLfIMAzt\n",

"sJ7RK8kWfX20MkTdXfVIlL+mxYTK14sQBQAAuJF6CdLc3Fz16tVL0dHRWr9+fa1rJk6cqLS0NJlM\n",

"Ji1atEjDhg2rj3HqhWEY2mY5o6TkI9qfdV6SLUQfHRCgacND5ePV0rEDAgAANBH1EqRTp07VmDFj\n",

"lJeXV+uaF154QYMGDdJnn32mvXv36oEHHlBGRoY8PDzqYyS7MQxDW46cVlKyRd9kn5ckmdxd9ehA\n",

"W4h28SREAQAAbobdg3T58uUKDg5W7969a706Kklr1qyR1WqVJEVFRalr167aunWrRo0aZe+R7MIw\n",

"DG358bReSbHoQGWItvRw1W8HBmrqsBB1JkQBAAB+FrsGaUZGhpYsWaJt27Zp9erVta7Ly8tTaWmp\n",

"fHx8qo4FBQUpKyur1s8pLi5WcXFxtWPl5eW3PnQdHM27qGdXperbY/mSbCE6YWCgnhoeos5tCVEA\n",

"AIBbcVNBGh0dLYvFUuNtqampeuKJJ7Rw4UK1amX/b+SZO3euZs+eXe3YoEGD7P44NenctqWOny9S\n",

"Kw83PRYdqCeHhqhTW1ODPDYAAEBz52IYhmGPO8rPz1dISIjatm0rSbpw4YIuXbqk6OhopaSkXLe+\n",

"TZs2SktLq7pKOmDAAM2ZM6fWl+xrukI6a9YsJSUl2WP8n/RVep5CO9+mjrcRogAAAPbkaq878vLy\n",

"Ul5enjIzM5WZman/9//+n+65554aY1SSxo8fryVLlkiS9u7dq5ycHA0fPrzW+zeZTPL09Kz2n5ub\n",

"m73G/0kDQ7yJUQAAgHpgtyD9Kfv27dPo0aOrPv7b3/6mXbt2yWw2Ky4uTitXrmz032EPAAAA+7Pb\n",

"S/aOMHPmTM2bN8/RYwAAAOAWNNgVUgAAAKAmBCkAAAAciiAFAACAQxGkAAAAcCiCFAAAAA5FkAIA\n",

"AMChCFIAAAA4FEEKAAAAhyJIAQAA4FBN+jc1PfjggwoKCmqQxyovL9eePXs0YMAAubm5NchjNgXs\n",

"S+3Ym5qxL7Vjb2rGvtSOvakZ+1I7R+xNYGCgEhISbrimSQdpQyooKJCXl5fy8/Pl6enp6HEaDfal\n",

"duxNzdiX2rE3NWNfasfe1Ix9qV1j3RtesgcAAIBDEaQAAABwKIIUAAAADkWQ1pHJZNIf/vAHmUwm\n",

"R4/SqLAvtWNvasa+1I69qRn7Ujv2pmbsS+0a697wTU0AAABwKK6QAgAAwKEIUgAAADgUQQoAAACH\n",

"Ikj/S1BQkLp3767IyEhFRkZq9erVNa5bvny5zGazQkND9eSTT6q0tLSBJ21YddmXLVu2qFWrVlVr\n",

"IiMjdfnyZQdM27CKi4s1Y8YMmc1m9erVSxMmTKhxnbOdM3XZF2c8Z/Ly8qo93/DwcLm7u+vs2bPX\n",

"rf3kk090++23y2w268EHH1RBQYEDJm4Ydd2XzMxMubm5VVublpbmoKkbzsaNG9WvXz9FRkaqZ8+e\n",

"euutt2pc50znjFS3fXHWc+azzz7TnXfeqd69e2vQoEE6cOBAjesazTljoJrAwEAjNTX1hmvS09MN\n",

"X19f48SJE0ZFRYXxy1/+0li4cGHDDOggddmXzZs3G3369GmQeRqTxMREY8aMGUZFRYVhGIZx4sSJ\n",

"69Y44zlTl31x1nPmWn//+9+NMWPGXHe8sLDQ6Ny5s3H48GHDMAzjmWeeMX7/+9839HgOU9u+ZGRk\n",

"GF5eXg0/kANVVFQY7du3Nw4cOGAYhm0PTCaTUVBQUG2ds50zdd0XZzxnzp49a3To0MH47rvvDMMw\n",

"jG3bthkRERHXrWtM5wxXSH+GtWvXauzYsfLx8ZGLi4umTZumVatWOXosOMDFixe1fPly/eUvf5GL\n",

"i4skycfH57p1znbO1HVfYLtyPnny5OuO//vf/1bfvn11++23S5KefvrpZn3O/Lfa9sVZubi46Pz5\n",

"85Jsv/rR29v7uh/b44znTF32xRmlpaXJ29tbERERkqShQ4cqKytL+/fvr7auMZ0zBGkNJk6cqF69\n",

"emny5Mk6ffr0dbdnZWUpMDCw6uOgoCBlZWU15IgO8VP7Itn+EvTr109RUVFatGhRA0/Y8NLS0tSh\n",

"QwfNmTNHd955p4YOHaqUlJTr1jnbOVPXfbmy1pnOmWvt2rVL586d05gxY667raZz5sSJEyorK2vI\n",

"ER3iRvsi2f6HJyoqSv369dMf//hHlZeXN/CEDcvFxUWrV6/Wgw8+qMDAQA0ZMkRvvfWWWrRoUW2d\n",

"s50zdd0XyfnOGbPZrLy8PO3atUuStGHDBhUWFiozM7PausZ0zhCk/2Xbtm369ttvtX//fnXs2FGT\n",

"Jk1y9EiNQl32pV+/fjp27Jj279+vjz76SEuWLNGaNWscMG3DKSsr09GjR9WjRw/t27dP8+fP18MP\n",

"P6xTp045ejSHquu+OOM5c63ly5dr4sSJcnd3d/QojcqN9sXX11c5OTnau3evkpOTtX37dv3jH/9w\n",

"wJQNp6ysTH/+85/14Ycf6ujRo0pJSdFjjz2mM2fOOHo0h6rrvjjjOePl5aW1a9fqxRdfVP/+/fXF\n",

"F1+oR48ejfprDUH6XwICAiRJHh4eSkxM1Pbt22tcc/To0aqPMzMzqz6vuarLvnh6esrLy0uS5Ofn\n",

"p0ceeaTGdc1JQECAXF1d9dvf/laS1LdvXwUHB+vgwYPXrXOmc6au++KM58wVFy5c0Jo1a/TEE0/U\n",

"eHtN54yvr2+j/gfFHn5qX0wmkzp37ixJ6tChg5544olmf8588803On78uIYNGyZJioqKkp+fn1JT\n",

"U6utc7Zzpq774oznjCSNGDFCW7du1ddff61//OMfOn78uHr06FFtTWM6ZwjSa1y8eLHqvSiStGrV\n",

"KvXt2/e6dePGjdOGDRt08uRJGYahJUuW6De/+U0DTtqw6rovJ06cUEVFhSSpsLBQn3zySY3rmpOO\n",

"HTsqNjZWn3/+uSQpIyNDGRkZuuOOO6qtc7Zzpq774oznzBWrV69Wnz59qt679d9+8YtfaP/+/frh\n",

"hx8kSYsWLWrW58wVP7Uvubm5VT+hori4WB9++GGzP2f8/f114sQJHT58WJJktVqVlpam7t27V1vn\n",

"bOdMXffFGc8Zyfb19Yo//elPGjlypMLCwqqtaVTnjEO+laqRSktLMyIjI41evXoZPXv2NMaOHWtk\n",

"ZGQYhmEYkydPNj7++OOqtUuXLjVCQkKMkJAQ44knnjBKSkocNHX9q+u+LFiwwOjRo4fRu3dvo0eP\n",

"HsYf/vCHqu+wbs7S0tKMmJgYo2fPnkbv3r2NtWvXGobh3OeMYdRtX5z1nDEMw4iOjjbeeOONasdm\n",

"zZplLF68uOrjjz/+2OjevbsRGhpq/OpXvzLOnz/f0GM2uJ/al3Xr1hkRERFV58yMGTOMoqIiR4za\n",

"oN57772qv0s9e/Y03n33XcMwOGfqsi/Oes5MmTKl6lyYMGGCce7cOcMwGu85w++yBwAAgEPxkj0A\n",

"AAAciiAFAACAQxGkAAAAcCiCFAAAAA5FkAIAAMChCFIAAIAmYP78+erZs6d69eql3r17a+XKlT/5\n",

"OZs2bZKbm5teeeWVqmMWi0V33323+vTpo4iICK1evbrqtlOnTunBBx9U7969dccdd1T7vLrIzc1V\n",

"ly5ddP/999/U5xGkAAAAjUxMTMx1v3s+IiJCO3fu1MGDB/Xpp58qMTFRaWlptd5Hfn6+XnjhBY0e\n",

"Pbra8bi4OD388MM6cOCAtmzZoueee045OTmSpJkzZ6pHjx769ttvtW/fPr355pvau3dvneeeOnWq\n",

"xowZU/cnWokgBQAAaAJiY2Orft2yv7+/fHx8lJ2dXev6GTNm6KWXXpK3t3e14wcOHKiK1E6dOqlP\n",

"nz5VV0mvva1NmzYaNmyY3nnnHUlSaWmpXnjhBQ0YMECRkZH69a9/rXPnzlXd7/LlyxUcHKyhQ4fe\n",

"9HMjSAEAAJqY5ORknTt3TlFRUTXevnbtWrm6umrs2LHX3da/f/+ql/vT09O1a9euqqux/fv313vv\n",

"vaeKigqdPn1an3/+edVtf//739WmTRvt2bNH33zzjXr16qWXXnpJku1XRC9ZskR/+ctfftbzcf9Z\n",

"nwUAAAC7mjhxor799ltJktVq1ejRo9WiRQtJ0vr16xUUFCRJOnjwoB5//HGtXr1abdq0ue5+Tp48\n",

"qT//+c/asmVLjY/z1ltv6Xe/+50iIyMVGBio2NhYubvbkvAf//iHfv/736tv377q3LmzYmJidPr0\n",

"6aoZ8vPztW7dOklSSUmJgoKCZBiGnnjiCS1cuFCtWrX6Wc+dXx0KAADQyMTExOjNN9+sitArDh06\n",

"pHvvvVfLli3T3XffXePnfvrpp3riiSeq4vDMmTNq0aKFpk+fXuMVzF/84hcaP368Jk+efN1t06ZN\n",

"U6dOnfSnP/1JUVFR+stf/qJ77rmn2pr8/HyFhISobdu2kqQLFy7o0qVLio6OVkpKSp2eL1dIAQAA\n",

"moDDhw9r9OjRWrp0aa0xKkn33XefTp06VfVxXFycIiMjlZiYKMn2nfSdOnWSq6urPv/8cx06dEiP\n",

"PvqoJCkvL0+enp7y8PBQamqq1q9fr9TUVEnS/fffr3/+858aMmSIWrdurUuXLikjI0MRERHKy8ur\n",

"erw333xT69ev1/r16+v83HgPKQAAQBMQHx+v/Px8Pf/884qMjFRkZKQ+//xzSdK+ffuu+2762vzr\n",

"X/9SeHi4unfvrr/+9a/auHFj1dXUPXv2qEePHrrjjjs0depUrVmzRr6+vpKk559/XlFRURo4cKB6\n",

"9+6tQYMG6ZtvvrHLc+MlewAAADgUV0gBAADgUAQpAAAAHIogBQAAgEMRpAAAAHAoghQAAAAORZAC\n",

"AADAoQhSAAAAOBRBCgAAAIciSAEAAOBQBCkAAAAciiAFAACAQ/1/zSgR+fLjQWEAAAAASUVORK5C\n",

"YII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-3a914761-8e69-4194-9a3e-030fcce0f4ff\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-3a914761-8e69-4194-9a3e-030fcce0f4ff\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_20['Height(Inches)'].plot(kind='line', figsize=(8, 4), title='Height(Inches)')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-012646f3-a8a9-4b3c-96ea-0a2080338a12\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAABNLklEQVR4nO3deVxVBf7/8de97CCLgIqKIMiiKAri0qKmomXrmE1ZaebSnpU1\n",

"zaTz6/ud+c60TXu2qWVqZaVj67RoaW5pBbhbKgqIooKisoiyn98fKCOJCXrhXO59Px+P+zDvPVze\n",

"53TEt597FothGAYiIiIiIjZgNTuAiIiIiDgOlUsRERERsRmVSxERERGxGZVLEREREbEZlUsRERER\n",

"sRmVSxERERGxGZVLEREREbEZlUsRERERsRmVSxERERGxGZVLEXFoTz31FJdffnmDl1+xYgUWi4XK\n",

"yspGf6+Kigri4+NJSUlp9Nc2xNy5cwkNDW2S9wa49tprmTt3bpO9v4g4B5VLEbFbgwcP5vHHHz/j\n",

"+fHjxzN27NgGvcdf//pXvv3222bJ9eabb9KlSxf69esHwO7du7FYLOzatcum37+pPPHEEzz22GOc\n",

"OHHC7Cgi0oKpXIqI2EB1dTUvvfQSd911l9lRzluvXr0IDw/n/fffNzuKiLRgKpci0qKVlpby17/+\n",

"lS5dutC6dWsGDRrEhg0bal//+9//zoABA2p/n5eXx8iRIwkICCAyMpL58+djsVhYsWJFnff97LPP\n",

"iImJwdfXl+HDh7Nv3z4A7rnnHlavXs2zzz5Lq1ataNWqFQDr169n//79DBky5KxZT33kvmjRonrf\n",

"G+DEiRM8/vjjta9HRkYyb968Ou8zc+ZMOnfujL+/PzfeeCNFRUW1rxUUFHDvvfcSHh5OUFAQV111\n",

"FZmZmbWvL1y4kO7du+Pn50dwcDDDhg2r894jRozgk08+OddmFxE5K5VLEWnR7rnnHlJSUli5ciWH\n",

"Dh3ipptu4oorrqCgoKDe5W+99VaqqqrIyspi3bp1LFy4sN7lPv30U1JTU8nJyeH48eP89a9/BWDG\n",

"jBkMHDiQv/zlLxw7doxjx44BkJaWRmRkJF5eXufMfLb3Brjzzjv59ttv+fzzzykqKuKHH34gPj6+\n",

"9vXc3Fy2b9/Otm3b2L59Oxs3buSFF14AwDAMrr/+eoqKitiwYQP79+8nPj6ea665hoqKCo4fP87Y\n",

"sWN59dVXKSoqIicnp873BujZsyepqannXAcRkbNRuRQRu/b8888TEBBQ5/HBBx8AcPjwYebNm8fr\n",

"r79OaGgorq6uTJ48GX9/f7788ssz3isnJ4fvv/+ef/3rX7Ru3ZrWrVvz5JNP1vt9n376afz9/fH3\n",

"9+fWW28950k6R44cwd/fv0HrdLb3zs/PZ/78+bzxxht069YNi8VChw4d6N27d+3Xurq68uyzz+Ll\n",

"5UX79u0ZOXJk7ddv2LCBNWvWMHPmTAIDA/Hw8OCpp54iKyuLn3/+GQA3Nze2bdtGfn4+np6eDB06\n",

"tE42f39/jh492qD1EBGpj8qliNi1Rx99lIKCgjqPW2+9FaD2RJn+/fvXKZ/79u0jJyfnjPc69fFz\n",

"eHh47XOdO3eu9/t26NCh9r99fHwoLi7+3ZyBgYEUFhY2aJ3O9t5ZWVkAxMbGnvVrg4ODcXNzq/fr\n",

"d+7cSWVlJaGhobXbIigoCIC9e/fi7e3N4sWLWbp0KbGxscTHx/PKK6/Uef/CwkJat27doPUQEamP\n",

"q9kBRETOV0hICACbN28mLCzsnMt37NgRgOzsbOLi4mr/u7Gs1jP/XZ6UlERmZialpaV4eno2+j3h\n",

"v0U3PT2dpKSkRn99SEgI7u7uHDp0qE4BPd3AgQMZOHAghmGwcuVKRowYQVxcHMOHDwdgy5Yt9OnT\n",

"57zyi4iAJpci0oKFh4czcuRI7r///tqSWFxczDfffMOBAwfOWD40NJTBgwczbdq02ilofZcUOpeQ\n",

"kBDS09PrPJeUlET79u1Zvnz5+a0M0KZNG2655Rbuv/9+duzYAcCBAwdYv359g75+wIAB9OjRg3vv\n",

"vZeDBw8CcPToUT7++GOOHz9Obm4u//73vykoKMBisRAQEIDFYsHV9b9zhsWLF3P99def9zqIiKhc\n",

"ikiL9sEHH5CUlMTw4cPx9fUlNjaWt956C8Mwzrq8YRiEh4eTmJjIddddB9CoaeOf/vQnduzYQevW\n",

"rQkICABqpplTpkxh5syZF7Q+b731FpdddhlXXnklrVq14tJLL+WXX35p0Ne6uLjw3Xff4e3tTf/+\n",

"/fH19aVXr158+umnWCwWDMNgxowZREZG0qpVK/74xz/y5JNP1p7hvnnzZrKysrjtttsuaB1ExLlZ\n",

"jLP9BBYRcQIbN24kMTGR/fv30759+wt6r4qKChITE3nnnXdqL6Teklx33XVcf/31TJgwwewoItKC\n",

"qVyKiFPZunUr5eXlJCQksH//fsaNGwfA999/b3IyERHHoI/FRcSpFBYWcvPNN+Pr60tSUhLBwcHM\n",

"nz/f7FgiIg5Dk0sRERERsRlNLkVERETEZlQuRURERMRmVC5FRERExGZULkVERETEZuymXP72/rYi\n",

"IiIi0vLYTbk8n/v7ioiIiIh9sZtyKSIiIiItn8qliIiIiNiMyqWIiIiI2IzKpYiIiIjYjMqliIiI\n",

"iNiMyqWIiIiI2IzKpYiIiIjYjMqliIiIiNiMyqWIiIiI2IzKpYiIiIjYjFOWS8MwyC0sNTuGiIiI\n",

"iMNxunKZfbiEP7y+hj/OWEt5ZbXZcUREREQcitOVy7a+nuwvKCXn6Ak+WZ9jdhwRERERh+J05dLL\n",

"3YV7LosE4NXvd2l6KSIiImJDTlcuAcb0Dye4lQf7Ck6waJ2mlyIiIiK24pTl0svdhXsHdwHg9eWa\n",

"XoqIiIjYilOWS4Ax/cNo61szvVyYttfsOCIiIiIOwWnLpadb3ellWWWVyYlEREREWj6nLZcAt/QL\n",

"o52fBwcKS1mYpmMvRURERC6UU5dLTzcX7hscBcAbml6KiIiIXDCnLpcAo/t2IsTPkwOFpSxI1bGX\n",

"IiIiIhfC6culp5sL9w3577GXpRWaXoqIiIicL6cvl1AzvWzv70leURkfpewxO46IiIhIi6VyCXi4\n",

"unDfkJPHXq7I0PRSRERE5DypXJ50U59QOvh7crC4jA81vRQRERE5LyqXJ3m4unD/UE0vRURERC6E\n",

"yuVpbkzqRMcALw4VlzH/Z00vRURERBpL5fI07q5W7j957OWbKzI4Ua7ppYiIiEhjqFz+xh+TQukY\n",

"4EX+sTLm/5xtdhwRERGRFkXl8jfcXa08cPLYyxkrNb0UERERaQyVy3rckBRKp0Av8o+V8/5Pml6K\n",

"iIiINJTKZT3cXKw8MCQaqJleHi+vNDmRiIiISMugcnkW1/fuSFigN4dLynnvR00vRURERBpC5fIs\n",

"3FysTD557OXMVZmUlGl6KSIiInIuKpe/Y1RiR8KDvDlSUs67ml6KiIiInJPK5e9wdbHywNCaYy9n\n",

"rcrQ9FJERETkHFQuz2FkQgcign04eryCeT/uNjuOiIiIiF1rdLksKytj8uTJREdHEx8fz9ixYwFY\n",

"vHgxffr0oWfPnlx00UVs2rTJ5mHNUDO9rDn2ctaqTI5peikiIiJyVq6N/YKpU6disVhIT0/HYrGQ\n",

"m5vL0aNHGTNmDKtWraJ79+6sXr2aMWPGsHXr1qbI3Oyu69WBV7/fRVZ+CfPW7q69RaSIiIiI1NWo\n",

"yWVJSQmzZ8/mySefxGKxABASEkJGRgZBQUF0794dgIEDB7Jnzx7Wr19f7/uUlZVRVFRU51FVZb93\n",

"wnF1sfJg8n+nl8WlFSYnEhEREbFPjSqXGRkZBAYG8tRTT9GnTx8GDhzIsmXLiI6O5vDhw6xduxaA\n",

"L774guLiYnbv3l3v+zz99NP4+/vXeaSkpFzwyjSl63p1JLKND4UnKpi7ZrfZcURERETsUqPKZWVl\n",

"JdnZ2cTFxZGWlsb06dMZPXo0paWlLFq0iGnTppGUlMS3335LXFwcrq71f+o+bdo0CgsL6zz69etn\n",

"kxVqKi5WCw8l15w5/vYPWRRpeikiIiJyhkYdcxkWFobVamXMmDEAJCYmEhERwZYtWxg2bBhDhgwB\n",

"aj72DgkJIS4urt738fDwwMPDo85zLi4u55O/WV3Ts+bYy10HjzF3zW4ePFk2RURERKRGoyaXwcHB\n",

"JCcns2TJEgCysrLIysqiW7duHDhwoHa5f/7znwwdOpSoKMc68cXFaqktlG+vzqTwhKaXIiIiIqdr\n",

"9KWIZsyYwXPPPUd8fDwjR45k5syZdOzYkf/93/+la9euREVFkZ2dzezZs5sir+mujm9PVNtWFJVW\n",

"MmdNltlxREREROyKxTAMw+wQAI888ggvvvii2TEa5D+b9vPAhxvw9XTlh8eG4u/lZnYkEREREbug\n",

"O/Sch6vj2xPTrhXFpZXM/kHTSxEREWleuw4Wc+e7aXy2YZ/ZUc6gcnkerFYLDyXHADDnhywKj+vY\n",

"SxEREWl6uYWlTP14M5e/tIrvfs3jpaXpVFfbxYfQtVQuz9OVPULoGuJLcVkls3/INDuOiIiIOLCi\n",

"0gqeXbydwc8v56PUvVQbcHlcO2bf3ger1WJ2vDoafftHqWE9ed3Le+ev5501u5k4IIIAb3ezY4mI\n",

"iIgDKaus4r0fs3lt+S4KTn5S2ie8NdOu6kpSeKDJ6eqncnkBruheM73cnlvM26uzePSKWLMjiYiI\n",

"iAOorjb4fNM+nl+Szr6CEwBEtW3FYyO6Mqxb29rbcNsjlcsLYLVamDIsmnveX8+cNVlMGhBBax9N\n",

"L0VEROT8GIbBqp35PPPNdrYdKAKgnZ8HjwyP4Ybeobi62P8RjSqXF+jyuBC6tfdj24Ei3v4hkz9f\n",

"0dXsSCIiItICbc4p4JlvtrM24zAAvp6u3Du4CxMuicDL3f7vZHiKyuUFOjW9vPu9dcxds5tJAyIJ\n",

"1PRSREREGij7cAnPLdnBl5tr7nbo7mJl3MXh3D8kqkV+IqpyaQOXx7Wjewc/ftlfxFurM3lshKaX\n",

"IiIi8vvyj5Xx6rKdzP95D5XVBhYLXJ/QkYeHx9Ap0NvseOdN5dIGLBYLU4bFcOe7acxbu5s7BkQQ\n",

"1MrD7FgiIiJih0rKKnl7dRazVmVQUl4FwGUxbXhsRFfiOviZnO7CqVzayLBubenR0Y+t+4qYtTqT\n",

"aVd2MzuSiIiI2JGKqmo+St3LK0t3kn+sDICeof5MHdGVS6KCTU5nOyqXNmKxWJiSHMMd76bx7tps\n",

"7hwYSbCmlyIiIk7PMAy+2ZrLc0t2kJVfAkB4kDd/viKWq3q0t7uLoF8olUsbSu7Wlp6h/mzOKeSt\n",

"VZlMu0rTSxEREWf2U+Zhnv5mO5v2FgAQ5OPOQ8OiublvGO6u9n9ZofOhcmlDNcdeRjNxbhrv/pjN\n",

"nYM0vRQREXFG23OLeHbxDr7ffhAAb3cX7hwYyZ2DImnl4dj1y7HXzgRDYtvSq1MAm/YWMHNlBv/v\n",

"6jizI4mIiEgz2Vdwghe/TeeTDTkYBrhaLdzSL4wHkqNo6+tpdrxmoXJpY6emlxPmpPLeTzXTS2fZ\n",

"mURERJxVwfFy3liRwdy1uymvrAbg6vj2PHpFLBHBPiana14ql01gcEwbEjoFsHFvATNXZvI/12h6\n",

"KSIi4ohKK6qYu3Y3byzfRVFpJQD9IwKZdlU3EjoFmBvOJCqXTeDU9HL8nFTe/ymbuwdF0tZP00sR\n",

"ERFHUVVt8PH6HF76Lp0DhaUAdA3x5bEruzI4pg0Wi2OdAd4YKpdN5LKYNiSGBbBhTwEzVmbyv9dq\n",

"eikiItLSGYbB99sP8q/F20nPOwZAB39P/nR5LCMTO+LiYJcVOh8ql03EYrHw8LAYxr2Twvyfs7nn\n",

"Mk0vRUREWrL1e47yzDfbSck6AoC/lxuTh0Rx28XheLq5mJzOfqhcNqGB0cEkhbdmXfZR3liRwd+v\n",

"6252JBEREWmkjEPHeH7JDr7ZmguAh6uVCZdGcO9lXfD3djM5nf1RuWxCp6aXY2f/zAcpe7jnsi6E\n",

"+Gt6KSIi0hIcLCrl5WU7WZC6l6pqA6sF/pgUypRhMXQI8DI7nt1SuWxil0YF0Se8NWnZR3lzxS7+\n",

"7w89zI4kIiIiv6O4tIJZqzJ5e3UWJyqqABjWrS1/vqIrsSG+JqezfyqXTcxisfDw8BjGvP0zH6bs\n",

"5Z7BXWjvr3/tiIiI2Jvyymrm/5zNq9/v4khJOQCJYQFMu7Ib/SICTU7XcqhcNoNLugTRr3MgKbuP\n",

"8OaKDP6h6aWIiIjdqK42+M/m/Tz/7Q72HjkBQGSwD38ZEcsV3UOc+rJC50PlshlYLBamDI/m1rd+\n",

"5qOUvdxzWRcdqyEiImIHftiZzzOLt7F1XxEAbXw9eHhYDDf1CcXVxWpyupZJ5bKZXNIlmP4Rgfyc\n",

"dYQ3VuziiZHxZkcSERFxWlv3FfKvxdtZvTMfgFYertxzWSQTB0Tg7a56dCG09ZrRlGEx3PLWTyxI\n",

"3cu9g6PoqOmliIhIs9p75DgvfLuDzzbuB8DNxcLYi8KZPCSKoFYeJqdzDCqXzejiLkFcFBnIT5lH\n",

"eH35Lp66XtNLERGR5nCkpJxXv9/J+z9lU1FlAPCHhA78aXgsYUHeJqdzLCqXzezhYTGMnvUT/07b\n",

"y32DuxDaWju0iIhIUzleXsk7P2Qxc2UmxWWVQM1NTh4b0ZUeHf1NTueYVC6bWf/IIC7pEsTajMO8\n",

"vjyDp0dpeikiImJrlVXVLEzL4eWl6RwsLgOgewc/pl7ZlYHRbUxO59hULk3w8PAY1mb8WDu97BSo\n",

"6aWIiIgtGIbBkl/yeHbJdjIPlQAQ2tqLP18Ry7U9O2C16rJCTU3l0gR9OwcyICqYH3bl8/ryXTxz\n",

"Q0+zI4mIiLR4qbuP8PTX21i/pwCAQB93Hhgaxa39w/BwdTE3nBNRuTTJlGHR/LArn0Xrcrh/SJSm\n",

"lyIiIudpZ14x/1q8g6Xb8gDwcnPhjoER3DUoEl9PN5PTOR+VS5P06RzIwOhgVu/M59Xvd/LsH3uZ\n",

"HUlERKRFOVB4gpe+S2fRuhyqDXCxWhjdtxNTkqNp6+dpdjynpXJpoinDYli9M5+P1+/j/iFRhAf5\n",

"mB1JRETE7hWeqODNFRnMWZNFWWU1ACO6h/DoFbFEtW1lcjpRuTRRUnhrBsW0YVX6IV77fhfP3ajp\n",

"pYiIyNmUVlTx/k/ZvLZ8FwXHKwDo27k1U6/sRlJ4a5PTySkqlyZ7eFg0q9IP8cmGmull52BNL0VE\n",

"RE5XVW3w2YZ9vPhdOvsKTgAQ3bYVj43oSnK3tlgsOgPcnqhcmiwxrDWDY9uwYschXv1+Fy/cpOml\n",

"iIgI1FxWaEX6If71zXa25xYD0N7fk4eHx3BD71BcdFkhu6RyaQemDIthxY5DfLohh8lDo4jQ9FJE\n",

"RJzcpr0FPPPNdn7MPAyAr6cr9w+JYvwlnfF002WF7JnKpR1I6BTAkNg2LN9xiFeX7eTF0QlmRxIR\n",

"ETHF7vwSnvt2B19tPgCAu6uV8Zd05r7BXQjwdjc5nTSEyqWdmDIshuU7DvHZxn1MHhpFZBud7SYi\n",

"Is7jUHEZ05ft5MOUPVRWG1gsMCoxlIeHRxPaWteCbklULu1Er04BJHdty7LtB3n1+128pOmliIg4\n",

"gWNllby9OpO3VmVSUl4FwJDYNvxlRFe6tfczOZ2cD5VLOzJlWAzLth/k85PTyy6aXoqIiIOqqKrm\n",

"o5Q9vLJsJ/nHygHoFerP1Cu7cXGXIJPTyYVQubQj8aH+DOvWjqXb8pi+bCev3JxodiQRERGbMgyD\n",

"r7Yc4PklO9h9+DgAEcE+/PmKWK7sEaLLCjkAlUs7M2VYNEu35fHFpv08MDSKqLa+ZkcSERGxibUZ\n",

"+fzrm+1syikEILiVBw8Ni+bmvp1wc7GanE5sReXSzvTo6M/wuHZ892seryzbxau3aHopIiIt27YD\n",

"Rfxr8XZW7DgEgI+7C3cN6sIdAyPw8VAVcTSN/mdCWVkZkydPJjo6mvj4eMaOHQvA119/Te/evUlI\n",

"SKBHjx7MmzfP5mGdxZRh0QB8uXk/O/OKTU4jIiJyfnKOHueRhRu5avpqVuw4hKvVwu0Xh7Piz0N4\n",

"aFi0iqWDavT/1alTp2KxWEhPT8disZCbm4thGIwdO5YVK1bQs2dPdu/eTdeuXRk1ahS+vvpYt7G6\n",

"d/Dniu7tWPJLHq8s28lrt/Y2O5KIiEiDHS0p540Vu5i3NpvyqmoArunZnkcvj9Vtjp1Ao8plSUkJ\n",

"s2fPJicnp/aA25CQEAzDwGKxUFBQAEBRURFBQUF4eHjYPLCzmDIshiW/5PHVlgM8mFdMTDuVdBER\n",

"sW+lFVXMWbObN1bsori0EoCLI4OYemVXenUKMDecNJtGlcuMjAwCAwN56qmnWLp0KV5eXvz9738n\n",

"OTmZBQsWMGrUKHx8fDh69CiffPIJ7u71X0m/rKyMsrKyOs9VVVWd/1o4oG7t/biyRwjfbM3llaU7\n",

"eX2MppciImKfKquq+WT9Pl78Lp3colIAuob4MvXKrlwW00ZngDuZRh1zWVlZSXZ2NnFxcaSlpTF9\n",

"+nRGjx5NXl4eTzzxBJ988gnZ2dksW7aM2267jfz8/Hrf5+mnn8bf37/OIyUlxSYr5EgeOnns5Vdb\n",

"DrA9t8jkNCIiInUZhsF3v+Zx5Sur+cvHm8ktKqVjgBcv3tSLrx8cyODYtiqWTqhR5TIsLAyr1cqY\n",

"MWMASExMJCIigvfee4/9+/czaNAgAPr27UtoaCgbNmyo932mTZtGYWFhnUe/fv0ucFUcT9cQP66K\n",

"DwHglaU7TU4jIiLyX+uyj3LTzB+58900dh48RoC3G49f3Y1lf7qMUb1DsVpVKp1Vo8plcHAwycnJ\n",

"LFmyBICsrCyysrK48cYbOXDgANu2bQNg165dZGRkEBsbW+/7eHh44OfnV+fh4uJygavimB5KjsFi\n",

"gW+25rLtgKaXIiJiroxDx7j7vTRueHMtqbuP4uFq5d7BXVj55yHcMTASTzf9fe7sGn22+IwZM5g0\n",

"aRKPPfYYVquVmTNnEh4ezqxZs7jpppuwWq1UV1fz2muvERYW1hSZnUpsiC9Xxbfnq80HeGXpTmbc\n",

"lmR2JBERcUJ5RaW8vHQnC9P2UlVtYLXATX06MWVYDCH+nmbHEztiMQzDMDsEwCOPPMKLL75odgy7\n",

"tDOvmMtfXoVhwFcPDqB7B3+zI4mIiJMoKq1g1spM3v4hk9KKmssKDY9rx1+uiCVaVzKReujqpS1A\n",

"dDtfrunZgf9s2s8rS3cya1wfsyOJiIiDK6usYv5Pe3j1+50cPV4BQFJ4a6Ze2ZW+nQNNTif2TOWy\n",

"hXgoOYovN+/n21/z2LqvkB4dNb0UERHbq642+M/m/Tz/7Q72HjkBQJc2PvxlRFcuj2uns7/lnFQu\n",

"W4iotr5c27MDX2zaz8tLd/L27ZpeioiIba1KP8Qz32zn15MnkLbz8+DhYTH8MSkUV5dG3zFanJTK\n",

"ZQvyYHI0X27ez9Jtml6KiIjtbN1XyDPfbOeHXTXXp/b1cOWewV2YeGkEXu46+1saR+WyBYlq24rr\n",

"enXgs437eXlpOm/f3tfsSCIi0oLtOXyc57/dwReb9gPg7mLltovDuX9IFIE+9d9lT+RcVC5bmAeT\n",

"o/li036WbjvI5pwCeoYGmB1JRERamMPHynj1+13M/zmbiioDiwVGJnTkkeExdAr0NjuetHAqly1M\n",

"ZJtWjEzoyCcb9vHy0p28M17TSxERaZjj5ZXMXp3FzFWZHCurBGBQTBseGxGry9yJzahctkAPJEfz\n",

"2cZ9fL/9IBv3FpDQKcDsSCIiYscqqqpZmLaXl5fu5FBxGQDxHf2ZemVXLo0KNjmdOBqVyxYoItiH\n",

"kYkd+WT9Pl5ems7cCbovu4iInMkwDJb8ksuzi3eQmV8CQFigN3++Ipar49vr/t/SJFQuW6gHh0bz\n",

"+cb9rNhxiA17jpIY1trsSCIiYkdSso7w9Dfb2LCnAIBAH3ceHBrFrf3DcXfVZYWk6ahctlCdg324\n",

"PrEji9bl8PLSncybqOmliIhAel4x//pmO8u2HwTA292FOwZGcufACHw93UxOJ85A5bIFe2BoFJ9u\n",

"2MfK9EOsyz5KUrimlyIizmp/wQle+i6dj9fnUG2Ai9XCLf068WByNG19Pc2OJ05E5bIFCw/y4Ybe\n",

"HVmYlsPLS9N5b1J/syOJiEgzKzxewRsrdzF3zW7KKqsBuCo+hEcvjyWyTSuT04kzUrls4SYPieaT\n",

"9ftYvTOfddlHSAoPNDuSiIg0g9KKKt79cTevL8+g8EQFAP0iApl2ZVcdhy+mUrls4cKCvLmhdygL\n",

"Tl5iQtNLERHHVlVt8OmGfbz47Q72F5YCENvOl8eujGVIbFssFp0BLuZSuXQAk4dG8fH6HFbvzCdt\n",

"9xH6dNb0UkTE0RiGwYodh/jX4u1szy0GoL2/J48Mj2FU71BcdFkhsRMqlw6gU6A3N/YJ5cOUvby0\n",

"NJ35d1xkdiQREbGhjXsLePrrbfycdQQAP09X7h8Sxe2XdMbTzcXkdCJ1qVw6iPuHRLFoXQ5rdh0m\n",

"JesI/SI0vRQRaemy8kt4bsl2vt6SC4C7q5UJl3bmvsui8PfWZYXEPqlcOojQ1t7c2KcTH/y8h5e+\n",

"S+fDuzS9FBFpqQ4WlzJ92U4+StlLZbWBxQJ/7B3Kw8Nj6BDgZXY8kd+lculA7h8Sxb/T9vJj5mF+\n",

"yjzMRZFBZkcSEZFGOFZWyaxVmby9OpPj5VUAJHdty19GdCU2xNfkdCINo3LpQDoGeHFTn07M/3kP\n",

"Ly9N56O7LjY7koiINIBhGLz/UzYvL93J4ZJyABI6BTD1yq4aFEiLo3LpYGqmlzn8lHmEHzMOc3EX\n",

"/VASEbF3zy7ZwZsrMgCIDPbhz1fEMqJHiC4rJC2S7lzvYDoEeDG6bycAXlqajmEYJicSEZHf895P\n",

"2bXFctqVXVny8CCujG+vYiktlsqlA7pvSBfcXaykZNVML0VExD5992sef/t8KwAPD4vh7su64Oai\n",

"v5qlZdMe7IDa+3txSz9NL0VE7NnGvQU88OF6qg0Y3acTDyZHmR1JxCZULh3UvYOjcHe1krr7KGt2\n",

"aXopImJPsg+XMGluKqUV1VwW04Ynru+hj8HFYahcOqgQf09u7RcGwMuaXoqI2I0jJeWMn5PK4ZJy\n",

"enT0440xvfVRuDgU7c0O7N7BXfBwtZKWfZQfduWbHUdExOmdKK9i0rxUsvJL6BjgxTvj++LjoQu3\n",

"iGNRuXRg7fw8ubV/zfType80vRQRMVNVtcFDH21gw54C/L3cmDexL219Pc2OJWJzKpcO7t7LaqaX\n",

"6/cUsGqnppciImYwDIN//OcXvv01D3dXK2+N60NUW91xRxyTyqWDa+vnydiLwgFNL0VEzPLW6kzm\n",

"/ZgNwEs3JdAvItDkRCJNR+XSCdx9WSSeblY27i1gRfohs+OIiDiVLzbt56mvtwPw+NXduLpne5MT\n",

"iTQtlUsn0NbXk7H9a6aXLy/dqemliEgz+SnzMI8u3ATA+Es6M2lAhMmJRJqeyqWTuPuyLni6Wdm0\n",

"t4AVOzS9FBFpajvzirnr3TTKq6oZ0T2E/7kmTteyFKegcukk2vh6MO7izoDu2iMi0tTyikoZPyeV\n",

"otJKksJb8/LNCbhYVSzFOahcOpG7BkXi5ebC5pxCvt9+0Ow4IiIO6VhZJRPmpLKv4ASRwT68Na4P\n",

"nm4uZscSaTYql04kuJUH4y7RsZciIk2loqqae99fx68Highu5c7cCf0I9HE3O5ZIs1K5dDJ3DYzE\n",

"292FLfsKWbpN00sREVsxDIO/frKF1Tvz8XJzYfbtfQkL8jY7lkizU7l0MkGt/nvspe45LiJiOy8v\n",

"3cm/1+VgtcBrtybSq1OA2ZFETKFy6YTuGhSJj7sLv+wv4rtf88yOIyLS4i1M3csry3YC8M+RPUju\n",

"1s7kRCLmUbl0QoE+7tx+SWdAx16KiFyolemHmPbpFgDuH9KFMSevKyzirFQundSdAyNp5eHKrweK\n",

"WPKLppciIudj675C7nt/HVXVBqMSO/Lo5bFmRxIxncqlk2rt48742ullOtXVml6KiDRGztHjTJib\n",

"Skl5FZdGBfHMDT11kXQRVC6d2h0DI2jl4cr23GK+/TXX7DgiIi1G4fEKxs9J5VBxGV1DfHlzbBLu\n",

"rvorVQRULp1agLc7Ey7tDNQce6nppYjIuZVWVHHne2nsOniMED9P5kzoi5+nm9mxROyGyqWTu2NA\n",

"JL4np5eLf9H0UkTk91RXG/zp35tIyTqCr4crcyf2pb2/l9mxROyKyqWT8/d2Y8KACABe0fRSROR3\n",

"PbN4O19tPoCbi4WZtyXRNcTP7EgidkflUpg0IAJfT1d25BXz9dYDZscREbFLc9dkMWtVJgDP/rEn\n",

"l0QFm5xIxD41ulyWlZUxefJkoqOjiY+PZ+zYsRw+fJiEhITaR0xMDK6urhw5cqQpMouN+Xu5Mem0\n",

"6WWVppciInUs3prL/335KwB/viKW6xNDTU4kYr9cG/sFU6dOxWKxkJ6ejsViITc3l6CgIDZu3Fi7\n",

"zPPPP8/KlSsJDAy0ZVZpQhMujeCdH7LYefAYX285wLW9OpgdSUTELqzLPsJDH23AMODW/mHcN7iL\n",

"2ZFE7FqjJpclJSXMnj2bJ598svZaXiEhIWcsN3v2bCZNmmSbhNIsaqaXkQC8skzTSxERgMxDx7hj\n",

"XhplldUkd23LP67rrmtZipxDo8plRkYGgYGBPPXUU/Tp04eBAweybNmyOsusXbuWo0ePcs0115z1\n",

"fcrKyigqKqrzqKqqOr81EJuZMKAzfp6u7Dp4jC837zc7joiIqfKPlTF+TipHj1fQK9SfV29NxNVF\n",

"pyqInEuj/pRUVlaSnZ1NXFwcaWlpTJ8+ndGjR5OX99/bB86ePZtx48bh6nr2T9yffvpp/P396zxS\n",

"UlLOfy3EJvw83bhzYM30crqmlyLixI6XVzJpbip7jhwnLNCbt2/vi7d7o48kE3FKjSqXYWFhWK1W\n",

"xowZA0BiYiIRERFs2bIFgGPHjrFw4UImTpz4u+8zbdo0CgsL6zz69et3nqsgtjT+0s4EeLuRcaiE\n",

"/2zS9FJEnE9lVTUPfLCBTTmFtPZ2Y+6EvrTx9TA7lkiL0ahyGRwcTHJyMkuWLAEgKyuLrKwsunXr\n",

"BsCCBQvo1asXXbt2/d338fDwwM/Pr87DxcXlPFdBbMn3N9PLyqpqkxOJiDQfwzD42xe/sGz7QTxc\n",

"rbx9ex8i27QyO5ZIi9Log0dmzJjBc889R3x8PCNHjmTmzJl07NgR0Ik8juL2S2qml5n5JfxHx16K\n",

"iBN5c2UG83/eg8UCr9ycSFK4rnoi0liNPoAkMjKS5cuX1/va2rVrLziQmK+Vhyt3DozkuSU7mL5s\n",

"F9f27KCD2EXE4X22YR/PLt4BwN+uiWNEjzOvhiIi56bGIPW6/ZLOtPZ2Iyu/hM83anopIo5t7a58\n",

"/rxoEwB3Doxg/KURJicSablULqVerTxcuWtQzYWCX/1ex16KiOPanlvE3e+to6LK4Oqe7Zl2ZTez\n",

"I4m0aCqXclbjLg4n0Med3YeP8+mGfWbHERGxuQOFJ5gwJ5Xiskr6RQTywo29sFp1kXSRC6FyKWfl\n",

"4+HK3YNqzhx/9ftdVGh6KSIOpKi0gglzUjlQWEqXNj7Mui0JTzdduUTkQqlcyu+67eJwgnzc2XNE\n",

"00sRcRzlldXc+/46tucW08bXg7kT+hHg7W52LBGHoHIpv8vb3ZW7Lzs1vdyp6aWItHiGYTD1482s\n",

"2XUYb3cX5ozvS6dAb7NjiTgMlUs5p7EXhRPcyp29R07wyfocs+OIiFyQF75N55MN+3CxWnhjTG96\n",

"dPQ3O5KIQ1G5lHPydnflnstOnTm+i/JKTS9FpGX64Oc9vLZ8FwBPXx/P4Ni2JicScTwql9IgY/qH\n",

"E9zKg5yjJ/hY00sRaYGWbcvj8c+2APBQcjQ39e1kciIRx6RyKQ3i5e7CvYNrppevaXopIi3Mpr0F\n",

"TP5gA9UG3JgUypRh0WZHEnFYKpfSYGP6h9HG14N9BSdYtE7TSxFpGfYcPs6keamcqKhiYHQwT42K\n",

"x2LRtSxFmorKpTSYp5sL95489vL15Zpeioj9O1pSzvg5KeQfKyeuvR9vjk3CzUV/9Yk0Jf0Jk0a5\n",

"tX8YbU9OLxem7TU7jojIWZVWVHHHu2lk5pfQMcCLORP60srD1exYIg5P5VIaxdPNhfsG/3d6WVZZ\n",

"ZXIiEZEzVVUbTPloI+uyj+Ln6crcCX1p5+dpdiwRp6ByKY12c78wQvw8OVBYysJUTS9FxP488dWv\n",

"LP4lF3cXK7PG9SG6na/ZkUSchsqlNJqnmwv3DTk1vczQ9FJE7MrbqzOZs2Y3AM/f1IuLIoPMDSTi\n",

"ZFQu5byM7tuJED9PcotKWaDppYjYia82H+CJr7YB8NerunJdrw4mJxJxPiqXcl48XF24f8h/j70s\n",

"rdD0UkTMlZJ1hIcXbgTg9ovDuXNgpLmBRJyUyqWct5v6dqKDvyd5RWV8lLLH7Dgi4sR2HSzmznfT\n",

"KK+s5vK4dvzvtd11LUsRk6hcynnzcHXhviFRALyxIkPTSxExxcHiUm5/J5XCExUkhgXwys2JuFhV\n",

"LEXMonIpF+SmPp3oGODFweIyPvhZ00sRaV4lZZVMnJvKvoITdA7y5u1xffBydzE7lohTU7mUC+Lu\n",

"auX+k9PLN1dqeikizaeiqpr75q9n674ignzcmTexH0GtPMyOJeL0VC7lgv0xKZSOAV4cKi5jvqaX\n",

"ItIMDMPg8U+3sjL9EJ5uVmaP70t4kI/ZsUQElUuxAXdXK5OHnpxersjgRLmmlyLStF79fhcL0vZi\n",

"tcCrt/QmoVOA2ZFE5CSVS7GJPyaFEtrai/xjZcz/OdvsOCLiwP6dtpcXv0sH4P/+0IPhce1MTiQi\n",

"p1O5FJtwc7HywMnp5YyVGRwvrzQ5kYg4olXph5j2yRYA7h3chdsuCjc5kYj8lsql2Myo3qGEBXqT\n",

"f6yc93/S9FJEbOuX/YXc+/46KqsN/pDQgT9fHmt2JBGph8ql2Iyby3+PvZy5MlPTSxGxmX0FJ5gw\n",

"J5WS8ioujgzi2T/2xKprWYrYJZVLsalRiR0JD/LmcEk57/2o6aWIXLjC4xWMfyeFg8VlxLRrxYzb\n",

"kvBw1bUsReyVyqXYlKuLlcknr3s5c1UmJWWaXorI+SurrOKu99LYefAY7fw8mDuhH/5ebmbHEpHf\n",

"oXIpNnd9Ykc6B3lzpKScdzW9FJHzVF1t8Oi/N/Nz1hFaebgyd0I/OgR4mR1LRM5B5VJsztXFygND\n",

"owGYtSqDY5peish5+NeS7fxn035crRZmjE2iW3s/syOJSAOoXEqT+ENCByKCfTh6vIJ5a3ebHUdE\n",

"Wph3f9zNzJWZAPzrhp4MiA42OZGINJTKpTQJVxcrDybXHHv51upMTS9FpMG+/SWXv3/xCwB/Gh7D\n",

"DUmhJicSkcZQuZQmc12vjkQG+1Cg6aWINND6PUd58KMNVBtwS79OtZc3E5GWQ+VSmoyL1cKDyaeO\n",

"vcykuLTC5EQiYs9255dwx7w0SiuqGRLbhn/+oQcWi65lKdLSqFxKk7q2Vwe6tPGh8EQFc9fsNjuO\n",

"iNipw8fKuH1OCkdKyonv6M9rt/bG1UV/RYm0RPqTK03q9OnlW6szKdL0UkR+40R5FRPnpZF9+Dih\n",

"rb2YPb4PPh6uZscSkfOkcilN7pqeHYhq24qi0krm/LDb7DgiYkeqqg0e+HADm/YWEODtxryJ/Wjr\n",

"62l2LBG5ACqX0uRcrBYeOjm9nP1DJoUnNL0UETAMg79/8QtLt+Xh7mrl7XF96NKmldmxROQCqVxK\n",

"s7g6vj3Rp6aXa7LMjiMidmDmqkze+ykbiwVeGZ1An86BZkcSERtQuZRmYbVaeGjYqelllqaXIk7u\n",

"8437eOab7QA8fnUcV8a3NzmRiNiKyqU0m6t6tCe2nS/FpZXM/kHTSxFn9WPGYR799yYAJg2IYNKA\n",

"CJMTiYgtqVxKszl9ejnnhywKj2t6KeJs0vOKueu9NCqqDK6KD+H/XdXN7EgiYmMql9KsRnQPoWuI\n",

"L8Vllcz+IdPsOCLSjPKKShn/TgrFpZX07dyaF29KwGrVRdJFHI3KpTQrq9XClJPTy3fW7KbgeLnJ\n",

"iUSkORSXVjB+Tir7C0uJbOPDW+P64OnmYnYsEWkCKpfS7C6PC6Fbez+OlVXy9modeyni6Cqqqrlv\n",

"/nq2HSgiuJUH8yb0I8Db3exYItJEGl0uy8rKmDx5MtHR0cTHxzN27NjffV7kt6ynXfdyzposjpZo\n",

"einiqAzDYOrHW1i9Mx9vdxfmjO9Lp0Bvs2OJSBNq9P21pk6disViIT09HYvFQm5u7u8+L1KfK7q3\n",

"I669H78eKOKt1Zn8ZURXsyOJSBN46bt0Pl6fg4vVwuu39iY+1N/sSCLSxBpVLktKSpg9ezY5OTlY\n",

"LDUHYYeEhJz1eZGzsVhqjr286711zFu7mzsGRhLoo4/JRBzJRyl7mP79LgCeGNmDIV3bmpxIRJpD\n",

"oz4Wz8jIIDAwkKeeeoo+ffowcOBAli1bdtbnz6asrIyioqI6j6qqqgteGWlZhse1o0dHP0rKq3hr\n",

"tc4cF3Eky3cc5P99thWAB4ZGcUu/MJMTiUhzaVS5rKysJDs7m7i4ONLS0pg+fTqjR4/mxIkT9T6f\n",

"l5dX7/s8/fTT+Pv713mkpKTYZIWk5bBYLExJjgFg3trdHD5WZnIiEbGFLTmF3D9/PVXVBqN6d+SR\n",

"4TFmRxKRZtSochkWFobVamXMmDEAJCYmEhERwd69e+t9fsuWLfW+z7Rp0ygsLKzz6Nev3wWuirRE\n",

"yd3aEt/Rn+PlVczS9FKkxdt75DgT5qZyvLyKAVHBPDOqZ+3hUiLiHBpVLoODg0lOTmbJkiUAZGVl\n",

"kZWVxcUXX1zv89261X/nBQ8PD/z8/Oo8XFx0vTNndOrYS4B312aTr+mlSItVcLyc2+ekkH+sjK4h\n",

"vrw5tjfurrrinYizafSf+hkzZvDcc88RHx/PyJEjmTlzJh07djzr8yLnMrRrW3qF+nOioopZqzS9\n",

"FGmJSiuquGNeGpmHSmjv78ncCf3w9XQzO5aImMBiGIZhdgiARx55hBdffNHsGGKS5dsPMmFuKp5u\n",

"Vlb/ZShtfD3MjiQiDVRdbTD5w/V8vSUXX09XFt1zCbEhvmbHEhGT6PMKsQuDY9uQ0CmA0opqZq3K\n",

"MDuOiDTCk19v4+stubi5WJh5W5KKpYiTU7kUu3D6sZfv/ZTNweJSkxOJSEPM/iGL2T/U3Mb1+Rt7\n",

"cUmXYJMTiYjZVC7FblwW04bEsJrp5cyVOvZSxN59s+UAT3z1KwCPjejKHxJ0nL2IqFyKHamZXtZc\n",

"D+/9n7I5WKTppYi9Stt9hIcWbMQw4LaLwrnnskizI4mInVC5FLsyKDqY3mEBlFVW8+ZKHXspYo8y\n",

"Dh3jjnfTKK+sZli3dvz9uu66lqWI1FK5FLtisVh4+OTdPOb/vIc8TS9F7Mqh4jLGz0mh4HgFvToF\n",

"8OotibhYVSxF5L9ULsXuDIgKpk94a8orq3lzhaaXIvaipKySiXNT2XvkBOFB3sy+vQ9e7roBhojU\n",

"pXIpduf06eUHKXvILdT0UsRslVXVTP5gPVv2FRLo487cCf0IbqXr0YrImVQuxS5d0iWIfp0DT04v\n",

"d5kdR8SpGYbB/3y+leU7DuHhauXt2/sQEexjdiwRsVMql2KXTr/u5YcpezlQeMLkRCLO6/Xlu/gw\n",

"ZS8WC0y/JZHeYa3NjiQidkzlUuzWxV2C6BcRSHlVNW8s17GXImb4eF0Oz3+bDsD/XdedK7qHmJxI\n",

"ROydyqXYLYvFwsMnr3u5IHUv+ws0vRRpTj/szOexjzcDcPegSMZd3NncQCLSIqhcil27uEsQF0We\n",

"nF7q2EuRZvPr/iLueX8dldUG1/bqwGMjupodSURaCJVLsXunTy/3aXop0uT2F5xgwtwUjpVV0j8i\n",

"kOdv7IlV17IUkQZSuRS71z8yiEu6BFFRZfD6ck0vRZpS4YkKxs9JIa+ojOi2rZh1Wx88XHUtSxFp\n",

"OJVLaRFO3XP832l7yTl63OQ0Io6prLKKe95bR3reMdr6ejB3Yj/8vd3MjiUiLYzKpbQI/SICuTRK\n",

"00uRplJdbfDYos38mHkYH3cX5kzoS8cAL7NjiUgLpHIpLcbDtdPLHPYe0fRSxJae+3YHn23cj6vV\n",

"wptjk+jewd/sSCLSQqlcSovRp3MgA6ODqazW9FLElt7/KZs3V9RcS/bpUfEMimljciIRaclULqVF\n",

"OXXs5aJ1ml6K2MLSX/P438+3AjWfDtzYp5PJiUSkpVO5lBYlKbw1g2LaUFlt8Or3O82OI9Kibdxb\n",

"wOQP11NtwOg+nXgwOcrsSCLiAFQupcU5dc/xj9fvI/twiclpRFqm7MMlTJqbSmlFNZfFtOGJ63tg\n",

"sehaliJy4VQupcXpHdaay2LaUFVt8Or3OvZSpLGOlJQzfk4qh0vK6d7Bj9fH9MbNRX8diIht6KeJ\n",

"tEgPD6859vLTDfvYna/ppUhDnSivYtK8VLLyS+gY4MWc8X1p5eFqdiwRcSAql9IiJXQKYEisppci\n",

"jVFVbfDQRxvYsKcAfy835k3sS1s/T7NjiYiDUbmUFuvUmeOfbsghS9NLkd9lGAb/+M8vfPtrHu4u\n",

"Vt4a14eotr5mxxIRB6RyKS1Wr04BJHdtS7UBry7TmeMiv+et1ZnM+zEbgBdH96JfRKDJiUTEUalc\n",

"Sov20Mkzxz/buI+MQ8dMTiNin77YtJ+nvt4OwONXd+Oanh1MTiQijkzlUlq0nqEBDOum6aXI2fyU\n",

"eZhHF24CYPwlnZk0IMLkRCLi6FQupcU7dezlF5v2s+ugppcip+zMK+aud9Mor6pmRPcQ/ueaOF3L\n",

"UkSanMqltHg9OvozPK5dzfRSd+0RASCvqJTxc1IpKq0kKbw1L9+cgItVxVJEmp7KpTiEU3ftqZle\n",

"FpucRsRcx8oqmTAnlX0FJ4gM9uGtcX3wdHMxO5aIOAmVS3EI3Tv4c0X3dhgGvLJM170U51VRVc29\n",

"76/j1wNFBLdyZ+6EfgT6uJsdS0SciMqlOIyHkmuOvfxy837S8zS9FOdjGAZ//WQLq3fm4+Xmwuzb\n",

"+xIW5G12LBFxMiqX4jDiOvgxonvIyemljr0U5/PKsp38e10OVgu8dmsivToFmB1JRJyQyqU4lFPX\n",

"vfx6ywF25Gp6Kc5jYepeXl5a84+qf47sQXK3diYnEhFnpXIpDqVbez+uiq+ZXk7X9FKcxMr0Q0z7\n",

"dAsA9w/pwpj+4SYnEhFnpnIpDueh5BgsFvhqywG25xaZHUekSW3dV8h976+jqtrg+sSOPHp5rNmR\n",

"RMTJqVyKw4kN8eWq+PYAvLJU00txXDlHjzNhbiol5VVcGhXEv27oqYuki4jpVC7FIT2UHI3FAt9s\n",

"zeXX/ZpeiuMpPF7B+DmpHCouo2uIL2+OTcLdVT/SRcR8+kkkDimmnS9Xn5peLks3OY2IbZVWVHHn\n",

"e2nsOniMED9P5kzoi5+nm9mxREQAlUtxYKeml0t+yeOX/YVmxxGxiepqgz/9exMpWUfw9XBl7sS+\n",

"tPf3MjuWiEgtlUtxWNHtfLm2ZwdAx16K43hm8Xa+2nwANxcLM29LomuIn9mRRETqULkUh/ZgcjRW\n",

"C3z7ax5b92l6KS3b3DVZzFqVCcCzf+zJJVHBJicSETmTyqU4tKi2rbiuV8308mVNL6UFW7w1l//7\n",

"8lcA/nxFLNcnhpqcSESkfiqX4vAeODm9XLotjy05ml5Ky7Mu+wgPfbQBw4Bb+4dx3+AuZkcSETkr\n",

"lUtxeF3atOIPCR0BnTkuLU/moWPcMS+Nsspqkru25R/Xdde1LEXErqlcilN4YGjUyenlQTbnFJgd\n",

"R6RB8o+VMX5OKkePV9Ar1J9Xb03E1UU/tkXEvjX6p1RZWRmTJ08mOjqa+Ph4xo4dC0Dnzp2JjY0l\n",

"ISGBhIQEFixYYPOwIucrsk0rRibWTC917KW0BMfLK5k0N5U9R47TKdCLt2/vi7e7q9mxRETOqdE/\n",

"qaZOnYrFYiE9PR2LxUJubm7tawsWLCAhIcGW+URs5sGh0Xy+cT/fbz/Ixr0FJHQKMDuSSL0qq6p5\n",

"4IMNbMoppLW3G/Mm9KONr4fZsUREGqRRk8uSkhJmz57Nk08+WXvMT0hISJMEE7G1zsE+XF87vdSx\n",

"l2KfDMPgb1/8wrLtB/FwtfL27X2IbNPK7FgiIg3WqHKZkZFBYGAgTz31FH369GHgwIEsW7as9vVx\n",

"48YRHx/PpEmTOHTo0Fnfp6ysjKKiojqPqqqq818LkQZ6YGgULlYLK3YcYv2eo2bHETnDmyszmP/z\n",

"HiwWeOXmBJLCA82OJCLSKI0ql5WVlWRnZxMXF0daWhrTp09n9OjR5OXlsWrVKjZv3sz69esJDg7m\n",

"9ttvP+v7PP300/j7+9d5pKSkXPDKiJxLeJAPo05OL3XXHrE3n23Yx7OLdwDwv9fEMaJHe5MTiYg0\n",

"XqPKZVhYGFarlTFjxgCQmJhIREQEW7ZsISwsDAA3NzemTJnC6tWrz/o+06ZNo7CwsM6jX79+F7Aa\n",

"Ig33wNBoXK0WVqYfYl22ppdiH9buyufPizYBcOfACCZcGmFyIhGR89OochkcHExycjJLliwBICsr\n",

"i6ysLLp160ZBQUHtch9++CGJiYlnfR8PDw/8/PzqPFxcXM5vDUQaKSzImxt619zdRMdeij3YnlvE\n",

"3e+to6LK4Oqe7Zl2ZTezI4mInLdGny0+Y8YMJk2axGOPPYbVamXmzJmUlZVxzTXXUFVVhWEYREZG\n",

"8u677zZFXhGbmDw0io/X57B6Zz7rso/ouDYxzYHCE0yYk0pxWSX9Ogfywo29sFp1kXQRabkaXS4j\n",

"IyNZvnz5Gc9v2LDBJoFEmkOnQG9u7BPKhyl7eem7nbx/R3+zI4kTKiqtYMKcVA4UltKljQ+zxiXh\n",

"6aZPcUSkZdOtHsRp3Tc4ClerhR925ZO6+4jZccTJlFdWc+/769ieW0wbXw/mTuhHgLe72bFERC6Y\n",

"yqU4rZrpZSdAx15K8zIMg6kfb2bNrsN4u7swZ3xfOgV6mx1LRMQmVC7FqU0eGoWbi4U1uw6TkqXp\n",

"pTSPF75N55MN+3CxWnhjTG96dPQ3O5KIiM2oXIpT6xjgxU0np5cvfafppTS9D37ew2vLdwHw9PXx\n",

"DI5ta3IiERHbUrkUp3f/kCjcXaz8mHmYnzIPmx1HHNiybXk8/tkWAB5Kjuamvp1MTiQiYnsql+L0\n",

"OgR4MbqvppfStDbtLWDyBxuoNuDGpFCmDIs2O5KISJNQuRQB7hvSBXcXKz9nHWFtRr7ZccTB7Dl8\n",

"nEnzUjlRUcXA6GCeGhWPxaJrWYqIY1K5FAHa+3txc79TZ47vxDAMkxOJozhaUs74OSnkHysnrr0f\n",

"b4zpjZuLfvSKiOPSTziRk+4bHIW7q5WUrCP8mKFjL+XClVZUcce7aWTml9AxwIs5E/ri6+lmdiwR\n",

"kSalcilyUoi/J7f2CwPgpaXpml7KBamqNpjy0UbWZR/Fz9OVORP60s7P0+xYIiJNrtG3fxRxZPcO\n",

"7sKHKXtI3X2UNbsOMyA62OxIYscMw+B4eRVFpRUUl1ZSdOLkr6UVrEw/xOJfcnF3sTJrXB9i2vma\n",

"HVdEpFmoXIqcpp2fJ7f2D2POmt28tDSdS6OCdOKFAyuvrKa4tIKi0sqaX0+c/PW0sljzWuXJ504u\n",

"U1bz67GySqqqf3/C/fxNvbgoMqiZ1khExHwqlyK/ce9lXfjg5z2syz7K6p35DIppY3YkqUd1tcGx\n",

"8v9OC2snh2Wnl8T//nr6VPHUsmWV1TbJ4mq14Ovpip+XG76ervh6uOHn5cofEjpyVXx7m3wPEZGW\n",

"QuVS5Dfa+nkypn8476zJ4uWl6QyMDtb00sYMw6Cssrrej5Pr+/2piWHt66UVHCurxFaHxbbycK0p\n",

"h55udUti7XM1ZdHX0w0/z//+emo5LzcX7SMiIiepXIrU457BkXyQks36PQWs2pnPZZpe1lFVbVB8\n",

"WtE7Y1L4m4+X6yuO5VW2mRq6u1jPLH5eNdPD04vib4ujn6cbfp5utPJ0xcWqYigiYisqlyL1aOvr\n",

"ydj+4bz9QxYvfZfOIAeaXhqGwYmKqjoFsOj0j5V/e3xh6ZlTxZLyKptksVhqpoanFz+/04pg3Ylh\n",

"/WXR083FJllERMQ2VC5FzuLuy7rw/s/ZbNxbwIr0QwyJbWt2JAAqqqrrL4K/8/Hyb49DPNdJKA3l\n",

"6Wb9zcTw9Kmgaz1lsO7Hyz7urlg1NRQRcSgqlyJn0cbXg3EXd2bWqkxe/i6dwTFtLnh6WV1tUFJe\n",

"/8fEtQWxno+ZT1/uRIVtpoYuJ09CqfORcT0F8GwTQ19PN9xddalcERGpS+VS5HfcNSiS937MZlNO\n",

"ISt2HOKSqKCzHl/428JYdMYJKTUnodhoaIiPu0udIni24wprJ4m/+XjZ210noYiIiO2pXIr8juBW\n",

"Hoy7OJyZqzKZOC/VZmcnu7lYzjwz2ePsxxeefgKKn5crrTxccdX9qUVExA6pXIqcw12DIlm0LofD\n",

"JeW1z/l61Pcx8e8fX3j65Ws8XK2aGoqIiENSuRQ5h6BWHqz8yxAKjpfj6+lGKw9dukZERORsVC5F\n",

"GqCVR81H0SIiIvL7dNCWiIiIiNiMyqWIiIiI2IzKpYiIiIjYjMqliIiIiNiMyqWIiIiI2IzKpYiI\n",

"iIjYjMqliIiIiNiMyqWIiIiI2IzKpYiIiIjYjMqliIiIiNiMyqWIiIiI2IzFMAzD7BAAo0aNonPn\n",

"zs3yvaqqqkhJSaFfv364uLg0y/dsCbRdzk7bpn7aLmenbVM/bZez07apn7bL2ZmxbcLDw3nooYd+\n",

"dxm7KZfNqaioCH9/fwoLC/Hz8zM7jt3Qdjk7bZv6abucnbZN/bRdzk7bpn7aLmdnr9tGH4uLiIiI\n",

"iM2oXIqIiIiIzahcioiIiIjNOGW59PDw4G9/+xseHh5mR7Er2i5np21TP22Xs9O2qZ+2y9lp29RP\n",

"2+Xs7HXbOOUJPSIiIiLSNJxycikiIiIiTUPlUkRERERsRuVSRERERGzGoctl586diY2NJSEhgYSE\n",

"BBYsWFDvcrNnzyY6OpouXbpw5513UlFR0cxJm1dDtsuKFSvw8vKqXSYhIYETJ06YkLZ5lZWVMXny\n",

"ZKKjo4mPj2fs2LH1Luds+0xDtosz7jOHDx+us74xMTG4urpy5MiRM5b98ssv6dq1K9HR0YwaNYqi\n",

"oiITEjePhm6X3bt34+LiUmfZjIwMk1I3n6+//prevXuTkJBAjx49mDdvXr3LOdM+Aw3bLs66zyxe\n",

"vJg+ffrQs2dPLrroIjZt2lTvcnazzxgOLDw83NiwYcPvLpOZmWm0b9/eOHDggFFdXW1ce+21xmuv\n",

"vdY8AU3SkO2yfPlyo1evXs2Sx55MmTLFmDx5slFdXW0YhmEcOHDgjGWccZ9pyHZx1n3mdM8995xx\n",

"zTXXnPF8cXGx0bZtW2Pbtm2GYRjG/fffbzz66KPNHc80Z9suWVlZhr+/f/MHMlF1dbXRunVrY9Om\n",

"TYZh1GwDDw8Po6ioqM5yzrbPNHS7OOM+c+TIESMwMNDYunWrYRiGsWrVKqN79+5nLGdP+4xDTy4b\n",

"YtGiRVx33XWEhIRgsVi45557+PDDD82OJSYoKSlh9uzZPPnkk1gsFgBCQkLOWM7Z9pmGbhepmWhP\n",

"mjTpjOe/+eYbEhMT6dq1KwD33XefQ+8zv3W27eKsLBYLBQUFQM3t+4KCgs64lIwz7jMN2S7OKCMj\n",

"g6CgILp37w7AwIED2bNnD+vXr6+znD3tMw5fLseNG0d8fDyTJk3i0KFDZ7y+Z88ewsPDa3/fuXNn\n",

"9uzZ05wRTXGu7QI1O3Tv3r3p27cvb7zxRjMnbH4ZGRkEBgby1FNP0adPHwYOHMiyZcvOWM7Z9pmG\n",

"bpdTyzrTPnO6tWvXcvToUa655pozXqtvnzlw4ACVlZXNGdEUv7ddoOYfL3379qV379784x//oKqq\n",

"qpkTNi+LxcKCBQsYNWoU4eHhDBgwgHnz5uHu7l5nOWfbZxq6XcD59pno6GgOHz7M2rVrAfjiiy8o\n",

"Li5m9+7ddZazp33GocvlqlWr2Lx5M+vXryc4OJjbb7/d7Eh2oSHbpXfv3uTk5LB+/Xo+/fRTZsyY\n",

"wcKFC01I23wqKyvJzs4mLi6OtLQ0pk+fzujRo8nLyzM7mqkaul2ccZ853ezZsxk3bhyurq5mR7Er\n",

"v7dd2rdvz759+0hNTWXp0qWsXr2aF154wYSUzaeyspInnniCTz75hOzsbJYtW8Ztt91Gfn6+2dFM\n",

"1dDt4oz7jL+/P4sWLWLatGkkJSXx7bffEhcXZ9c/axy6XIaFhQHg5ubGlClTWL16db3LZGdn1/5+\n",

"9+7dtV/nqBqyXfz8/PD39wcgNDSUW265pd7lHElYWBhWq5UxY8YAkJiYSEREBFu2bDljOWfaZxq6\n",

"XZxxnznl2LFjLFy4kIkTJ9b7en37TPv27e36LwdbONd28fDwoG3btgAEBgYyceJEh99nNm7cyP79\n",

"+xk0aBAAffv2JTQ0lA0bNtRZztn2mYZuF2fcZwCGDBnCypUrWbduHS+88AL79+8nLi6uzjL2tM84\n",

"bLksKSmpPXYD4MMPPyQxMfGM5W644Qa++OILcnNzMQyDGTNmcPPNNzdj0ubV0O1y4MABqqurASgu\n",

"LubLL7+sdzlHEhwcTHJyMkuWLAEgKyuLrKwsunXrVmc5Z9tnGrpdnHGfOWXBggX06tWr9lin3xox\n",

"YgTr169n+/btALzxxhsOvc+ccq7tcvDgwdorLZSVlfHJJ584/D7TqVMnDhw4wLZt2wDYtWsXGRkZ\n",

"xMbG1lnO2faZhm4XZ9xnoObn6yn//Oc/GTp0KFFRUXWWsat9xpTTiJpBRkaGkZCQYMTHxxs9evQw\n",

"rrvuOiMrK8swDMOYNGmS8fnnn9cuO2vWLCMyMtKIjIw0Jk6caJSXl5uUuuk1dLu8+uqrRlxcnNGz\n",

"Z08jLi7O+Nvf/lZ7prAjy8jIMAYPHmz06NHD6Nmzp7Fo0SLDMJx7nzGMhm0XZ91nDMMwLr74YuOd\n",

"d96p89z//M//GG+++Wbt7z///HMjNjbW6NKli/GHP/zBKCgoaO6Yze5c2+Xjjz82unfvXrvPTJ48\n",

"2SgtLTUjarP64IMPav8s9ejRw5g/f75hGNpnGrJdnHWfueOOO2r3hbFjxxpHjx41DMN+9xndW1xE\n",

"REREbMZhPxYXERERkeancikiIiIiNqNyKSIiIiI2o3IpIiIiIjajcikiIiIiNqNyKSIiItLMpk+f\n",

"To8ePYiPj6dnz568//775/ya77//HhcXF15++eXa53bu3Mnw4cPp1asX3bt3Z8GCBbWv5eXlMWrU\n",

"KHr27Em3bt3qfF1DHDx4kHbt2jFy5MhGfZ3KpYiIiEgTGjx48Bn3Au/evTtr1qxhy5YtfPXVV0yZ\n",

"MoWMjIyzvkdhYSFTp07lqquuqvP8+PHjGT16NJs2bWLFihX85S9/Yd++fQA88sgjxMXFsXnzZtLS\n",

"0pg7dy6pqakNzn333XdzzTXXNHxFT1K5FBEREWlmycnJtbfM7dSpEyEhIezdu/esy0+ePJnHH3+c\n",

"oKCgOs9v2rSptnC2adOGXr161U4vT3/Nx8eHQYMG8d577wFQUVHB1KlT6devHwkJCdx0000cPXq0\n",

"9n1nz55NREQEAwcObPS6qVyKiIiImGjp0qUcPXqUvn371vv6okWLsFqtXHfddWe8lpSUVPuRemZm\n",

"JmvXrq2dkiYlJfHBBx9QXV3NoUOHWLJkSe1rzz33HD4+PqSkpLBx40bi4+N5/PHHgZrb/M6YMYMn\n",

"n3zyvNan+e9mLiIiIuLgxo0bx+bNm4Gae6VfddVVuLu7A/DZZ5/RuXNnALZs2cKECRNYsGABPj4+\n",

"Z7xPbm4uTzzxBCtWrKj3+8ybN48//elPJCQkEB4eTnJyMq6uNfXuhRde4NFHHyUxMZG2bdsyePBg\n",

"Dh06VJuhsLCQjz/+GIDy8nI6d+6MYRhMnDiR1157DS8vr/Nad93+UURERKQJDR48mLlz59YWylN+\n",

"/fVXrrzySt5++22GDx9e79d+9dVXTJw4sbbo5efn4+7uzr333lvvZHHEiBHceOONTJo06YzX7rnn\n",

"Htq0acM///lP+vbty5NPPsnll19eZ5nCwkIiIyPx9fUF4NixYxw/fpyLL76YZcuWNWh9NbkUERER\n",

"aWbbtm3jqquuYtasWWctlgBXX301eXl5tb8fP348CQkJTJkyBag5I7xNmzZYrVaWLFnCr7/+yq23\n",

"3grA4cOH8fPzw83NjQ0bNvDZZ5+xYcMGAEaOHMlLL73EgAED8Pb25vjx42RlZdG9e3cOHz5c+/3m\n",

"zp3LZ599xmeffdbgddMxlyIiIiLN7MEHH6SwsJDHHnuMhIQEEhISWLJkCQBpaWlnnBV+Nv/5z3+I\n",

"iYkhNjaWZ555hq+//rp2ypmSkkJcXBzdunXj7rvvZuHChbRv3x6Axx57jL59+9K/f3969uzJRRdd\n",

"xMaNG22ybvpYXERERERsRpNLEREREbEZlUsRERERsRmVSxERERGxGZVLEREREbEZlUsRERERsRmV\n",

"SxERERGxGZVLEREREbEZlUsRERERsRmVSxERERGxGZVLEREREbEZlUsRERERsZn/D2C+eJK0qPXz\n",

"AAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-012646f3-a8a9-4b3c-96ea-0a2080338a12\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-012646f3-a8a9-4b3c-96ea-0a2080338a12\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_21['Weight(Pounds)'].plot(kind='line', figsize=(8, 4), title='Weight(Pounds)')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-7bc6d455-b503-47a4-ae5b-0c628371eeef\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAABW0UlEQVR4nO3dd3hUZcL+8e9MekIKqZQ0IAkdQo8KCEJQscAiNkBERXFdFhH2\n",

"teyrv113VfbdVRTb2sUGC6usvRGKAkqHgFJMAiEEQhqk95nz+yNx1ghIIsmclPtzXXNdm3POzNxz\n",

"9pDcPnPOcyyGYRiIiIiIiDQzq9kBRERERKR9UPEUEREREadQ8RQRERERp1DxFBERERGnUPEUERER\n",

"EadQ8RQRERERp1DxFBERERGnUPEUEREREadQ8RQRERERp1DxFJF2q0OHDqxfv77B248ZM4YHH3zw\n",

"V73XsmXLuOKKK37Vc50lNTUVi8VCenr6Obd94oknmDVrVrNnEpG2RcVTRFqFZ555hk6dOvHTu/yu\n",

"XbsWi8XCX/7yl3rbTpkyhenTp5/zNUtKShgzZkyTZVy/fj0Wi4Wampp6yysqKvjDH/7Ao48+6lg2\n",

"a9Ys3Nzc6NChA76+vsTGxvK3v/2tybI0t7lz5/Lll1+yfft2s6OISCui4ikirUJiYiLZ2dns3bvX\n",

"sWz16tX069ePpKQkxzKbzca6deuYMGGCGTHPaPny5YSHhxMfH19v+fXXX09JSQlFRUU8//zzPPzw\n",

"wyxdutSUjI3l4eHBjBkzePLJJ82OIiKtiIqniLQKvXr1IjIyktWrVzuWrV69mj//+c/s2LGDkpIS\n",

"ALZt20ZBQQHjx49ny5YtjBkzhqCgIKKionjooYfqjUZaLJZ6pfX1118nJiYGX19fpkyZwty5c08b\n",

"ES0uLmbatGn4+/sTERHBP//5TwAyMjK4/PLLAQgICKBDhw489thjALz33ntceumlZ/1sFouFxMRE\n",

"+vbty44dOwD49ttvGTVqFB07dqRbt27cf//9VFZWnjV7eno6FouF1NRUAJYuXUp4eDgvvvgi0dHR\n",

"+Pv7c+2111JUVOR4TlpaGuPGjcPPz4/evXuzbt26ermSk5O5+OKLCQgIoGPHjgwZMoSDBw861l92\n",

"2WV89NFHp43wioicjYqniLQaiYmJjuKZn5/Pvn37mDhxIoMGDXKcq7l69Wr69OlDSUkJ48aN4847\n",

"7yQ7O5uvv/6aDz/8kP/7v/8742t//fXX3HnnnTzzzDMUFBQwe/ZsXnvttdO2W7p0KbNnz+bUqVM8\n",

"9dRTzJ07l9TUVCIjI/nss88AKCgooKSkhD/+8Y8AbN++nX79+p31c9ntdr788ku+++47hg8fTkZG\n",

"BuPHj+eaa64hOzubL7/8ko8++oj77ruvUfvrxIkTHDhwgP3793PgwAF2797NE088AdSODF911VVE\n",

"RkaSlZXF6tWrefnll+s9/6677mLcuHHk5eWRm5vLq6++SkBAgGP9gAEDKC4u5sCBA43KJSLtl4qn\n",

"iLQaEyZM4Ouvv6ayspI1a9aQkJCAl5cX48ePdxTS1atXM2HCBJ577jmuuuoqbrjhBlxdXYmKiuLe\n",

"e+/l9ddfP+Nrv/nmm0yaNInLL78cFxcXJk6cyMSJE0/b7pprruGSSy7BarVyzTXXEBgY6BilPJuT\n",

"J0/i7+9/2vKVK1cSEBBASEgICxYs4NFHH+Wmm27inXfeIS4ujvnz5+Pu7k5sbCyPPPIIL730Ur1z\n",

"XM/F1dWVv//973h5edG5c2cmT57M1q1bAdi8eTMHDx7kqaeewsfHh/DwcB566KF6z3d3dycjI4Mj\n",

"R47g6upKfHw8YWFhjvU/fqaTJ082OJOItG8qniLSaowbN47Kyko2bdrE6tWrGT9+vGP56tWrKSkp\n",

"YfPmzSQmJpKSksJ//vMfAgICHI/f/va3nDhx4oyvfezYMaKiouoti46OPm27Ll261PvZx8eH4uLi\n",

"X8wdGBhIYWHhacuvu+46CgoKyM/P57vvvmPhwoUAHD16lB49etTbNiYmhvLycnJzc3/xvX4qODgY\n",

"Nze3M2bNzMykY8eO9Qpxt27d6j1/6dKlWCwWLrnkEsLDw5k/f77jlAbA8ZkCAwMbnElE2jcVTxFp\n",

"NYKCghg8eDCrV6+uVzwTEhI4evQob7/9NhaLhYsvvphOnToxbdo0CgoKHI+ioqJ6xemnunbtypEj\n",

"R+ot+/nP52K1nvlX6pAhQ/j+++8b/DoREREcOnSo3rK0tDS8vLwICQkBaqeCKi0tdaw/fvx4o7KG\n",

"h4dz6tSpeoX459MoRUVF8fLLL3PkyBHWr1/P6tWrWbRokWP93r176dChA7169WrUe4tI+6XiKSKt\n",

"yoQJE3jjjTcoLCxk6NChALi5uTFq1Cj+8pe/cOGFF+Lj48Ndd93Fu+++y7///W+qqqqw2Wykpqby\n",

"+eefn/F1b7rpJj744AO++OILbDYbn3/+OZ9++mmjsnXq1Amg3gU4UDu90xdffNHg15k2bRoHDx7k\n",

"mWeeoaqqirS0NB566CFmz56NxWIBYOjQoSxdupSKigqys7N5+OGHG5V1xIgRxMbGsmDBAkpLSzl2\n",

"7BiPPPJIvW2WLl1KZmYmhmHg5+eHq6srrq6ujvWff/45V155Zb1lIiK/RMVTRFqVCRMmkJWVxdix\n",

"Y+uNMI4fP56srCwSExMBGDZsmOOCma5duxIUFMTUqVPPOop58cUX8/zzz3PXXXcREBDAiy++yPTp\n",

"0/H09Gxwtri4OH7/+98zduxYAgICHPNyTp8+nYyMDHbv3t2g14mKiuLLL79kxYoVhIaGcskll3D5\n",

"5Zfz97//3bHNc889x4kTJwgODiYxMZGbbrqpwTmh9vzPjz76iMOHD9O5c2fGjx/PbbfdVm+bdevW\n",

"MXz4cDp06MDAgQO54IILHBc4VVVV8dZbb7FgwYJGva+ItG8WozFnqouItCOTJ08mLCyMF1988bxf\n",

"65133mHZsmV88sknTZDMfIsXLyY5OZk33njD7Cgi0oqoeIqI1HnvvfdITEzEy8uLVatWMX36dNau\n",

"Xcvo0aPNjiYi0iboxBwRkTofffQRt99+O1VVVURFRfHaa6+pdIqINCGNeIqIiIiIU+jiIhERERFx\n",

"ChVPEREREXEKFU8RERERcQoVTxERERFxilZRPJcsWWJ2BBERERE5T62ieDb2fskiIiIi0vK0iuIp\n",

"IiIiIq2fiqeIiIiIOIWKp4iIiIg4hYqniIiIiDiFiqeIiIiIOIWKp4iIiIg4hYqniIiIiDiFiqeI\n",

"iIiIOIWKp4iIiIg4hYqniIiIiDiFiqeIiIiIOIWKp4iISAtWXFHNtS98w7zlu6issZkdR+S8uJod\n",

"QERERM7utY3pbEs/BZyirMrGP2cMxs1F40bSOunIFRERaaEKy6p5ZeMhACwWSNqfzfx/7abGZjc5\n",

"mciv06jiOW/ePKKjo7FYLOzevduxfMKECQwYMID4+HhGjRrFrl27AKioqGDy5MnExcUxcOBAEhMT\n",

"SU1NbdIPICIi0la9vOEQxRU19Orky6s3D8XNxcIne7P4w7+TsdkNs+OJNFqjiufUqVPZuHEjUVFR\n",

"9ZavXLmSPXv2sHv3bhYsWMCsWbMc6+644w4OHjxIcnIykyZNYvbs2U0SXEREpC07WVrF65sOAzB/\n",

"fByX9ArjuWmDcbVaeH/3cf64ai92lU9pZRpVPEePHk14ePhpywMCAhz/u7CwEIvFAoCnpycTJ050\n",

"/JyQkEB6evovvkdlZSVFRUX1HjabTqYWEZH25cWv0iitstGvqx+X9g0DYELfTjx1QzxWC6zYfpQ/\n",

"ffg9hqHyKa1Hk11cNHPmTNatWwfAp59+esZtlixZwqRJk37xdRYtWsTDDz9cb1lCQkLThBQREWkF\n",

"cooreOPbdAAWJMY5BnAArhzQhWqbnQUrk3lr8xHcXa08eEXvetuItFRNdnHRm2++ydGjR3nkkUe4\n",

"7777Tlv/2GOPkZqayqJFi37xdR544AEKCwvrPYYPH95UMUVERFq8f65Po6LaTnxEAGN7hp62/jeD\n",

"wln0m/4AvLrxMP/44qBGPqVVaPKr2m+++WbWrVtHfn6+Y9njjz/OqlWr+Oyzz/D29v7F53t4eODn\n",

"51fv4eLi0tQxRUREWqSswnLe2ZIBwMIJcWcdybxheCR/mdQXgOfXp/HMWl28Ky3feRfPgoICjh8/\n",

"7vj5/fffJygoiMDAQAAWL17M8uXLWb16db1zQUVEROR0z61LparGzvDoQEbGBP/itjMviObBK3oD\n",

"sHj1D7zwVZozIor8ao06x3POnDl88sknnDhxgksvvRRfX1/WrFnDtddeS3l5OVarlZCQED7++GMs\n",

"FguZmZksXLiQ7t27M3bsWKB2RHPLli3N8mFERERas8xTZazYdhSABb8w2vlTs0d1p7LGzj++OMjf\n",

"PjuAh6uVWy7q1txRRX6VRhXPF1988YzLt27desbl4eHhOudERESkgZ5Zk0q1zeCimCASugc1+Hm/\n",

"GxtDZbWNp9em8vBH+3B3tTJ9RNS5nyjiZLpzkYiISAuQnlfKuzszAViQ2LPRz78nMY45o7sD8L//\n",

"+Y53d2Q2aT6RpqDiKSIi0gI8vSYFm91gTM8QhkR1bPTzLRYL91/ei1kXRgNw77vJfLD7WBOnFDk/\n",

"Kp4iIiImS80p4f26krggMe5Xv47FYuFPV/XhxuGR2A1YsDKZz/ZmNVVMkfOm4ikiImKyp5J+wG5A\n",

"Yp8wBoQHnNdrWSwWHp3cj2sGh2OzG/x++S6S9mU3TVCR86TiKSIiYqIDJ4r4eE/tqOT5jHb+lNVq\n",

"4e9TB3DVwC7U2A3uemcnX/+Q2ySvLXI+VDxFRERM9OTqHwC4on9nenf2a7LXdbFaWHzdQC7tG0aV\n",

"zc7tb27n27T8cz9RpBmpeIqIiJjku2OFfPF9NhYLzB8f2+Sv7+Zi5ZkbB3NJr1Aqa+zc9sY2tqef\n",

"bPL3EWkoFU8RERGTLK4b7Zw0sAuxYb7N8h7urlaenz6YUbHBlFXZmPX6NnYfLWiW9xI5FxVPERER\n",

"E+zMOMXaAzm4WC3cPb5pzu08G083F166aSgjugVSUlnDzFe38P3xwmZ9T5EzUfEUERExwY/ndk4Z\n",

"1JVuwT7N/n5e7i68NmsYQ6I6UlRRw4xXtnDwRHGzv6/IT6l4ioiIONnWwyfZkJKHq9XCvHFNf27n\n",

"2fh4uPL6LcMYEO7PqbJqpr+yhbTcEqe9v4iKp4iIiBMZhsETXx4E4LphEUQEejv1/f083Xjz1uH0\n",

"7uxHXkkl017ezJH8UqdmkPZLxVNERMSJvknLZ8vhk7i7WJk7NsaUDAHe7rx923BiQzuQXVTJtJe3\n",

"kHmqzJQs0r6oeIqIiDjJT0c7p42IpEuAl2lZgjp48M7tI+ge7MOxgnKmv7KFE4UVpuWR9kHFU0RE\n",

"xEnW/5DLzowCPFyt3DWmh9lxCPX15J3bRxAR6MWR/DKmvbKZ3OJKs2NJG6biKSIi4gSGYTiuZJ95\n",

"QRShfp4mJ6rV2d+LZbMT6OLvyaHcUma8soWTpVVmx5I2SsVTRETECVbvy2ZPZiHe7i7cebH5o50/\n",

"FRHozbLbEwj19eBgdjE3vbqFwrJqs2NJG6TiKSIi0szsdsNxl6JZF0YT1MHD5ESniw72YdntCQR3\n",

"cOf740XMfH0rxRUqn9K0VDxFRESa2WffneDAiWJ8PVy5Y3R3s+OcVUxoB96ePYIAbzeSjxZwy+vb\n",

"KK2sMTuWtCEqniIiIs3IZjd4Mql2tPPWkd0I8HY3OdEv69XJj7dvG4Gvpyvbj5zitje2UV5lMzuW\n",

"tBEqniIiIs3oo+TjpOaU4Ofpym2jupkdp0H6dfXnzVuH4+PuwuZDJ7njre1UVKt8yvlT8RQREWkm\n",

"NTY7S9akAHDH6O74ebqZnKjhBkV25PVbhuPl5sKGlDzmLttJVY3d7FjSyql4ioiINJNVu45xOK+U\n",

"jt5uzLqodYx2/tTwboG8evNQPFytJO3P4e5/7aLGpvIpv56Kp4iISDOoqrHzdN1o550X96CDh6vJ\n",

"iX6dC2OCefGmIbi7WPnsuxMs/HcyNrthdixppVQ8RUREmsG/dxwl81Q5wR08mHlBtNlxzsuYnqE8\n",

"N30wrlYLH+w+zv3v7cGu8im/goqniIhIE6uotvHs2lQA7hrTAy93F5MTnb/EPmE8feMgrBb4945M\n",

"HvrgOwxD5VMaR8VTRESkif1rawZZhRV08vNk2ohIs+M0mYn9O7P4ungsFnhnSwZ/+Xifyqc0ioqn\n",

"iIhIEyqvsvHc+jQAfndJDJ5urX+086cmD+rK/00ZAMDrm9L5v88PqnxKg6l4ioiINKG3Nx8ht7iS\n",

"rgFeXD80wuw4zeK6YRH8dXI/AF74Ks0xZZTIuah4ioiINJHSyhpe+Kp2tHPeuBjcXdvun9mbEqJ4\n",

"8IreADyVlMLz61NNTiStQaP+RcybN4/o6GgsFgu7d+92LJ8wYQIDBgwgPj6eUaNGsWvXLse6lJQU\n",

"LrzwQuLi4hg2bBjff/99k4UXERFpSd74Np380iqigryZMjjc7DjNbvao7tx7WU8A/v75QV7deNjk\n",

"RNLSNap4Tp06lY0bNxIVFVVv+cqVK9mzZw+7d+9mwYIFzJo1y7Fuzpw53HHHHfzwww/cd9999daJ\n",

"iIi0FcUV1bz09SEA7h4Xi5tL2x3t/Km7xsRw97hYAP768T7e2nzE5ETSkjXqX8Xo0aMJDz/9v+AC\n",

"AgIc/7uwsBCLxQJATk4O27dvZ8aMGQBcc801HD16lNRUDceLiEjb8trGdArKqukR4sOk+K5mx3Gq\n",

"+eNjufPiHgA89P53rNx21ORE0lI12W0UZs6cybp16wD49NNPATh69CidO3fG1bX2bSwWC5GRkWRk\n",

"ZBATE3PG16msrKSysrLeMpvN1lQxRUREmlxhWTWvbKwd7Zw/Pg4Xq8XkRM5lsVi477KeVNbYeH1T\n",

"Ovet2oOHm7XdFXA5tyb7HuDNN9/k6NGjPPLII9x3332/+nUWLVqEv79/vcfWrVubKqaIiEiTe3nD\n",

"IYoraujVyZcr+nc2O44pLBYL/+/KPkwfEYlhwIKVyXy6N8vsWNLCNPkJKDfffDPr1q0jPz+fiIgI\n",

"srKyqKmpAcAwDDIyMoiMPPtkug888ACFhYX1HsOHD2/qmCIiIk3iZGkVr2+qvahm/vg4rO1stPOn\n",

"LBYLf53Uj6lDwrHZDeYt38Xqfdlmx5IW5LyLZ0FBAcePH3f8/P777xMUFERgYCChoaEMHjyYt99+\n",

"G4D33nuP8PDws37NDuDh4YGfn1+9h4tL25p8V0RE2o4Xv0qjtMpGv65+XNo3zOw4prNaLfzfNQO4\n",

"emAXauwGv3tnJ+sP5pgdS1qIRp3jOWfOHD755BNOnDjBpZdeiq+vL2vWrOHaa6+lvLwcq9VKSEgI\n",

"H3/8seMCoxdffJFZs2bx2GOP4efnx+uvv94sH0RERMTZcooreOPbdAAWJMY5/va1dy5WC4uvG0i1\n",

"zc5n351gzls7eH3WMC6MCTY7mpjMYrSC+1wtWLCAxYsXmx1DRESknoc/+p7XN6UTHxHAf+66UMXz\n",

"Z6pq7Nz1zg6S9ufg5ebCm7cNZ1h0oNmxxETtY5IxERGRJpZVWM47WzIAWDhBo51n4u5q5bnpgxkd\n",

"F0J5tY1bXt/GroxTZscSE6l4ioiI/ArPrUulqsbO8OhARuor5LPycHXhxRlDuKB7ECWVNcx8bSvf\n",

"HSs0O5aYRMVTRESkkTJPlbGibpL0BRrtPCcvdxdeuXkoQ6M6UlxRw02vbuHAiSKzY4kJVDxFREQa\n",

"6Zk1qVTbDC6KCSKhe5DZcVoFHw9XXr9lGAMjAjhVVs2MV7aQmlNidixxMhVPERGRRkjPK+XdnZkA\n",

"LEjsaXKa1sXX0403bxlOn85+5JVUMe3lzaTnlZodS5xIxVNERKQRnl6Tgs1uMKZnCEOiOpodp9Xx\n",

"93bj7dkjiAvrQE5xJdNf2ULmqTKzY4mTqHiKiIg0UGpOCe/vPgbUztspv06gjzvvzE6ge4gPxwrK\n",

"mfbyFrIKy82OJU6g4ikiItJATyX9gN2AxD5hDAgPMDtOqxbi68Gy2QlEBnqTcbKM6S9vIae4wuxY\n",

"0sxUPEVERBrgwIkiPt6TBWi0s6l08vdk2e0j6BrgxaG8Uqa/vIX8kkqzY0kzUvEUERFpgCdX/wDA\n",

"Ff0707uzn8lp2o7wjt4su30EYX4epOSUcNOrWykoqzI7ljQTFU8REZFz+O5YIV98n43FAvPHx5od\n",

"p82JCvJh2e0JBHfwYF9WETNf20pRRbXZsaQZqHiKiIicw+K60c5JA7sQG+Zrcpq2qUdIB96ZPYKO\n",

"3m7sySxk1mtbKamsMTuWNDEVTxERkV+wM+MUaw/k4GK1cPd4ndvZnHp28uWt20bg5+nKzowCblu6\n",

"jfIqm9mxpAmpeIqIiPyCH8/tnDKoK92CfUxO0/b16+rPm7eNoIOHK1sOn+SOt7ZTUa3y2VaoeIqI\n",

"iJzF1sMn2ZCSh6vVwrxxOrfTWeIjAlh6yzC83V3YkJLHXe/spKrGbnYsaQIqniIiImdgGAZPfHkQ\n",

"gOuGRRAR6G1yovZlaHQgr9w8FA9XK2sP5PD75Tuptql8tnYqniIiImfwTVo+Ww6fxN3FytyxMWbH\n",

"aZcu7BHMyzOH4u5i5Yvvs1mwMhmb3TA7lpwHFU8REZGf+elo57QRkXQJ8DI5Ufs1Oi6Ef84YjKvV\n",

"wkfJx7n33T3YVT5bLRVPERGRn1n/Qy47MwrwcLVy15geZsdp98b1DuOZGwfhYrXw3s5M/vf97zAM\n",

"lc/WSMVTRETkJwzDcFzJPvOCKEL9PE1OJACX9+/M4usGYrHA8q0ZPPzRPpXPVkjFU0RE5CdW78tm\n",

"T2Yh3u4u3HmxRjtbkknxXfn7NQMAWPpNOn/77IDKZyuj4ikiIlLHbjccdymadWE0QR08TE4kP3ft\n",

"0Age/U0/AF78+hBPJqWYnEgaQ8VTRESkzmffneDAiWJ8PVy5Y3R3s+PIWUwfEcX/u7IPAE+vSeG5\n",

"dakmJ5KGUvEUEREBbHaDJ5NqRztvHdmNAG93kxPJL7l1ZDfuv7wXAP/44iCvbDhkciJpCBVPERER\n",

"4KPk46TmlODv5cZto7qZHUca4M6Le3DP+DgAHvlkP29+m25uIDknFU8REWn3amx2lqypPVfwjtHd\n",

"8fN0MzmRNNS8cTGOKa/+3wffs2JbhsmJ5JeoeIqISLu3atcxDueVEujjzqwLo82OI41gsVj4n0t7\n",

"ctvI2lHq+1ftZdXOTJNTydmoeIqISLtWVWPn6brRzjsv7o6Ph6vJiaSxLBYLD17RmxkJkRgG/OHf\n",

"yXy857jZseQMVDxFRKRd+/eOo2SeKifE14ObEqLNjiO/ksVi4S9X9+O6oeHYDbj7X7v54vsTZseS\n",

"n1HxFBGRdqui2saza2un4rlrTA+83F1MTiTnw2q1sGjKACbHd8FmN5i7bCfrDuSYHUt+olHFc968\n",

"eURHR2OxWNi9ezcAFRUVTJ48mbi4OAYOHEhiYiKpqf+dT2vr1q0kJCQwaNAgevfuzd///vcm/QAi\n",

"IiK/1r+2ZpBVWEFnf09uHB5pdhxpAi5WC49fO5CJ/TtRbTOY8/YONqXmmR1L6jSqeE6dOpWNGzcS\n",

"FRVVb/kdd9zBwYMHSU5OZtKkScyePbveuj/+8Y/s2rWLTZs28fjjj7Nv376mSS8iIvIrlVfZeG59\n",

"GgC/GxuDp5tGO9sKVxcrS24YxPjeYVTV2LntjW1sOZRvdiyhkcVz9OjRhIeH11vm6enJxIkTsVgs\n",

"ACQkJJCenu5Yb7FYKCgoAKC0tBR3d3cCAwPPL7WIiMh5envzEXKLKwnv6MV1QyPMjiNNzM3FynPT\n",

"B3FxXAgV1XZuXbqNnRmnzI7V7jX5OZ5Llixh0qRJjp9ff/11HnroISIjI4mLi+Oxxx6jU6dOZ31+\n",

"ZWUlRUVF9R42m62pY4qISDtWWlnDP7+qHe2cd0ks7q665KEt8nB14cWbhnBhjyBKq2zc/NpW9mYW\n",

"mh2rXWvSf2mPPfYYqampLFq0yLHsb3/7G4sWLSIjI4Pvv/+e//3f//3Fr9oXLVqEv79/vcfWrVub\n",

"MqaIiLRzS79J52RpFdFB3kwZ3NXsONKMPN1ceOXmoQyL7khxRQ03vbaF/VlFZsdqt5qseD7++OOs\n",

"WrWKzz77DG9vbwDy8vL4z3/+w7Rp0wDo3r07CQkJbNq06ayv88ADD1BYWFjvMXz48KaKKSIi7VxR\n",

"RTUvfV17X++7x8fi6qLRzrbO292V12YNIz4igIKyama8soXUnGKzY7VLTfKvbfHixSxfvpzVq1cT\n",

"EBDgWN6xY0d8fHxYu3YtUFtEt2zZQr9+/c76Wh4eHvj5+dV7uLjohG8REWkar208TGF5NTGhHbh6\n",

"oEY72wtfTzfeuHU4/br6kV9axbSXt3A4r9TsWO1Oo4rnnDlzCA8PJzMzk0svvZSYmBgyMzNZuHAh\n",

"BQUFjB07lvj4eEaMGAGAi4sLK1eu5H/+538YOHAgo0ePZv78+VxwwQXN8mFERER+SUFZFa9uOAzA\n",

"/PGxuFgtJicSZ/L3cuOtW0fQq5MvOcWVTHt5M0dPlpkdq12xGIZhmB3iXBYsWMDixYvNjiEiIq3c\n",

"P744wHPr0ujVyZdP543CquLZLuUWV3LDS9+SlltKRKAXK+64gC4BXmbHahd0YouIiLQL+SWVvL4p\n",

"HYB7EuNUOtuxEF8Plt2eQFSQN0dPljP9lS3kFFWYHatdUPEUEZF24cWvD1FWZaN/V38m9AkzO46Y\n",

"LMzPk2W3J9A1wIvDeaVMe2ULeSWVZsdq81Q8RUSkzcspruDNb9MBWJAY57jpibRvXQO8WH57Ap38\n",

"PEnNKWHGK1soKKsyO1abpuIpIiJt3vPr0qiotjMoMoAxPUPMjiMtSGSQN8tuH0FwBw8OnCjmple3\n",

"UlhebXasNkvFU0RE2rSswnKWbckAYGFiT412ymm6h3Rg2e0jCPRxZ++xQma9vpWSyhqzY7VJKp4i\n",

"ItKmPbs2lSqbneHdArkoJsjsONJCxYX58vZtI/D3cmNXRgG3vr6NsiqVz6am4ikiIm3W0ZNlrNx+\n",

"FICFOrdTzqFPFz/evHU4vh6ubE0/ye1vbqei2mZ2rDZFxVNERNqsZ9amUG0zGBkTzIjuGu2UcxsY\n",

"EcDSW4fh7e7CptR8fvv2DiprVD6bioqniIi0Sel5pby38xgACybEmZxGWpMhUYG8NmsYnm5W1h3M\n",

"5ffLdlFts5sdq01Q8RQRkTZpyZoUbHaDsT1DGBzZ0ew40sokdA/ilZnDcHe18uW+bOav2E2Nyud5\n",

"U/EUEZE2JzWnmPd31412JvY0OY20ViNjg3lhxmDcXCx8sieLe9/dg93e4u803qKpeIqISJvzZFIK\n",

"hgET+oTRP9zf7DjSil3SK4xnbhyMi9XCql3H+ON/9qp8ngcVTxERaVP2ZxXxyZ4soPae7CLn67J+\n",

"nXjq+nisFvjXtqM8/NH3GIbK56+h4ikiIm3Kk6t/AOCKAZ3p3dnP5DTSVlw1sAv/mDoQiwXe+PYI\n",

"j326X+XzV1DxFBGRNmNvZiFf7svGaoF7xseaHUfamGuGhPPo5P4AvLzhMIvr/iNHGk7FU0RE2ozF\n",

"qw8CMCm+KzGhviankbZo2ohI/nxVHwCeWZvKM2tSTE7Uuqh4iohIm7DjyCnWHczFxWrh7nEa7ZTm\n",

"M+uibvxxYi8Anlj9Ay99nWZyotZDxVNERNqEH8/tvGZwV6KDfUxOI23dHaN7sLDu4rXHPj3AG9+k\n",

"mxuolVDxFBGRVm/LoXw2pubh5mLh95dotFOc4/fjYpk7NgaAP334Pcu2ZJicqOVT8RQRkVbNMAye\n",

"qBvtvG5oBBGB3iYnkvZk4YQ4bh/VDYD/fX8v7+7INDlRy6biKSIirdqm1Hy2Hj6Ju6uVuZfEmB1H\n",

"2hmLxcIfJ/Zm5gVRGAbc+24yHyYfNztWi6XiKSIirZZhGI4r2acNj6Szv5fJiaQ9slgs/Pmqvtww\n",

"LAK7Afes2M3n350wO1aLpOIpIiKt1vofctmZUYCnm5W7xvYwO460Y1arhUd/058pg7pisxv8fvlO\n",

"1h7INjtWi6PiKSIirZJhGI4r2WdeEE2or6fJiaS9c7Fa+PvUAVwxoDPVNoM7397JhpRcs2O1KCqe\n",

"IiLSKq3el82ezEK83V2YM7q72XFEAHB1sfLU9fEk9gmjqsbO7W9uZ/OhfLNjtRgqniIi0urY7Ybj\n",

"doW3XBRNUAcPkxOJ/Jebi5Vnpw1ibM8QKqrt3Lp0GzuOnDQ7Voug4ikiIq3OZ9+d4MCJYnw9XLl9\n",

"lEY7peXxcHXhnzOGMDImmLIqG7Ne28aezAKzY5lOxVNERFoVm93gyaTa0c5bR3YjwNvd5EQiZ+bp\n",

"5sJLM4cwvFsgxZU13PTqVvYdLzI7lqlUPEVEpFX5KPk4qTkl+Hu5cVvdxN0iLZW3uyuvzRrGoMgA\n",

"CsurmfHqFlKyi82OZRoVTxERaTVqbHaWrEkB4I7R3fHzdDM5kci5dfBwZektw+nf1Z+TpVVMe2UL\n",

"h3JLzI5lChVPERFpNVbtOsbhvFICfdyZdWG02XFEGszfy403bx1Or06+5BZXMu3lLWTkl5kdy+ka\n",

"VTznzZtHdHQ0FouF3bt3A1BRUcHkyZOJi4tj4MCBJCYmkpqa6niOYRj8+c9/Ji4ujv79+zN27Ngm\n",

"/QAiItI+VNXYebputPPOi7vj4+FqciKRxuno487bs0cQE9qBE0UVTHtlM8cKys2O5VSNKp5Tp05l\n",

"48aNREVF1Vt+xx13cPDgQZKTk5k0aRKzZ892rHv66afZs2cP3333HXv37mX58uVNk1xERNqVf+84\n",

"SuapckJ8PbgpIdrsOCK/SnAHD5bNHkF0kDeZp8qZ/vJmsosqzI7lNI0qnqNHjyY8PLzeMk9PTyZO\n",

"nIjFYgEgISGB9PR0x/p//OMf/O1vf8Pdvfaqw06dOv3ie1RWVlJUVFTvYbPZGhNTRETamIpqG8+u\n",

"rf027a4xPfBydzE5kcivF+rnybLbEwjv6EV6fhnTXt5MXkml2bGcosnP8VyyZAmTJk0CoKioiOzs\n",

"bD744ANGjBjBiBEjWLFixS8+f9GiRfj7+9d7bN26taljiohIK/KvrRlkFVbQ2d+TG4dHmh1H5Lx1\n",

"CfBi+e0JdPb3JC23lBmvbOFUaZXZsZpdkxbPxx57jNTUVBYtWgRATU0NNTU1lJeXs2XLFlasWME9\n",

"99xDcnLyWV/jgQceoLCwsN5j+PDhTRlTRERakfIqG8+tTwPgd2Nj8HTTaKe0DRGB3iy7PYEQXw8O\n",

"nChmxqtbKCyvNjtWs2qy4vn444+zatUqPvvsM7y9vQEIDAykQ4cOzJgxA4Do6Gguuugitm3bdtbX\n",

"8fDwwM/Pr97DxUW/ZERE2qu3Nx8ht7iS8I5eXDc0wuw4Ik2qW7APy2aPIMjHne+PF3Hza1sprmi7\n",

"5bNJiufixYtZvnw5q1evJiAgoN66G2+8kc8//xyAkydPsnXrVgYMGNAUbysiIm1caWUN//yqdrRz\n",

"3iWxuLtqFkBpe2LDfHl79ggCvN3YfbSAW5duo6yqxuxYzaJR/4LnzJlDeHg4mZmZXHrppcTExJCZ\n",

"mcnChQspKChg7NixxMfHM2LECMdzFi1axOeff06/fv0YPXo09913n746FxGRBln6TTonS6uIDvJm\n",

"yuCuZscRaTa9O/vx1q0j8PVwZVv6KWa/sZ2K6rZ3cbXFMAzD7BDnsmDBAhYvXmx2DBERcaKiimpG\n",

"/d86CsurefL6gfxmUPi5nyTSyu04coqZr26htMrGxXEhvDRzCB6ubeeUQ31nISIiLdJrGw9TWF5N\n",

"TGgHrh6o0U5pH4ZEdeS1WcPwdLPy1Q+5/O6dXVTb7GbHajIqniIi0uIUlFXx6obDAMwfH4uL1WJy\n",

"IhHnGdE9iFdmDsPd1UrS/mzm/2s3NW2kfKp4iohIi/PyhkMUV9bQq5MvE/t1NjuOiNONjA3mxZuG\n",

"4OZi4ZO9Wfzh38nY7C3+7MhzUvEUEZEWJb+kktc3pQNwT2IcVo12Sjs1tmcoz00bjKvVwvu7j/PH\n",

"VXuxt/LyqeIpIiItyotfH6Ksykb/rv5M6BNmdhwRU03o24mnbojHaoEV24/ypw+/pxVcF35WKp4i\n",

"ItJi5BRX8Oa36QAsSIzDYtFop8iVA7rwxHUDsVjgrc1HeOST/a22fKp4iohIi/H8ujQqqu0Migxg\n",

"TM8Qs+OItBi/GRTOot/0B+DVjYf5xxcHW2X5VPEUEZEWIauwnGVbMgBYmNhTo50iP3PD8Ej+Mqkv\n",

"AM+vT+OZtakmJ2o8FU8REWkRnl2bSpXNzvBugVwUE2R2HJEWaeYF0Tx4RW8AFq/+gRfqbinbWqh4\n",

"ioiI6Y6eLGPl9qMALNS5nSK/aPao7vzPpT0B+NtnB3h902GTEzWciqeIiJjumbUpVNsMRsYEM6K7\n",

"RjtFzuV3Y2OYd0kMAA9/tI93thwxOVHDqHiKiIip0vNKeW/nMQAWTIgzOY1I63FPYhxzRncH4H//\n",

"853jW4OWTMVTRERMtWRNCja7wdieIQyO7Gh2HJFWw2KxcP/lvZh1YTQA9723hw92HzM31DmoeIqI\n",

"iGlSc4p5v+4P5YLEnianEWl9LBYLf7qqDzcOj8QwYMHKZD7bm2V2rLNS8RQREdM8mZSCYcCEPmH0\n",

"D/c3O45Iq2SxWHh0cj+uGRyOzW7w++W7SNqXbXasM1LxFBERU+zPKuKTPbUjM/ck6txOkfNhtVr4\n",

"+9QBXDWwCzV2g7ve2cnXP+SaHes0Kp4iImKKJ1f/AMAVAzrTu7OfyWlEWj8Xq4XF1w3k0r5hVNns\n",

"/O6dnRSUVZkdqx4VTxERcbq9mYV8uS8bqwXuGR9rdhyRNsPNxcozNw7msr6deOK6gQR4u5sdqR5X\n",

"swOIiEj7s3j1QQAmxXclJtTX5DQibYu7q5V/zhjcIm/EoBFPERFxqh1HTrHuYC4uVgt3j9Nop0hz\n",

"aImlE1Q8RUTEyX48t/OawV2JDvYxOY2IOJOKp4iIOM2WQ/lsTM3DzcXC7y/RaKdIe6PiKSIiTmEY\n",

"Bk/UjXZeNzSCiEBvkxOJiLOpeIqIiFNsSs1n6+GTuLtamXtJjNlxRMQEKp4iItLsakc7a69knzY8\n",

"ks7+XiYnEhEzqHiKiEizW38wl10ZBXi6WblrbA+z44iISVQ8RUSkWRmGweK6cztnXhBNqK+nyYlE\n",

"xCwqniIi0qy+3JfN3mOFeLu7MGd0d7PjiIiJVDxFRKTZ2O2GY97OWy6KJqiDh8mJRMRMKp4iItJs\n",

"Pv0uiwMnivH1cOX2URrtFGnvGlU8582bR3R0NBaLhd27dwNQUVHB5MmTiYuLY+DAgSQmJpKamnra\n",

"c9euXYuLiwtPPfVUU+QWEZEWzmY3eCopBYDbRnUjwNvd5EQiYrZGFc+pU6eyceNGoqKi6i2/4447\n",

"OHjwIMnJyUyaNInZs2fXW19YWMj999/PxIkTzz+xiIi0Ch8mHyM1pwR/LzduHdnN7Dgi0gI0qniO\n",

"Hj2a8PDwess8PT2ZOHGi42b0CQkJpKen19tm7ty5PPjggwQFBZ1fWhERaRVqbHaW1I123jG6O36e\n",

"biYnEpGWoMnP8VyyZAmTJk1y/Pzuu+9itVq5+uqrG/T8yspKioqK6j1sNltTxxQRkWa0aucx0vPL\n",

"CPJxZ9aF0WbHEZEWwrUpX+yxxx4jNTWVNWvWAHDixAkeeeQR1q9f3+DXWLRoEQ8//HC9ZQkJCU0Z\n",

"U0REmlFVjZ0la2pHO++8uAc+Hk36p0ZEWrEm+23w+OOPs2rVKpKSkvD29gZgx44dZGVlER8fD0Be\n",

"Xh4ffvghubm5PProo2d8nQceeIAFCxbUW/bQQw81VUwREWlmK7cf5VhBOSG+HsxIiDr3E0Sk3WiS\n",

"4rl48WKWL19OUlISAQEBjuVXXHEF2dnZjp9nzZpFfHw88+fPP+treXh44OFRf543FxeXpogpIiLN\n",

"rKLaxrNra2c2+d2YHni56/e3iPxXo87xnDNnDuHh4WRmZnLppZcSExNDZmYmCxcupKCggLFjxxIf\n",

"H8+IESOaK6+IiLRgy7dmcKKogs7+ntwwPNLsOCLSwjRqxPPFF18843LDMBr0/KVLlzbm7UREpBUp\n",

"r7Lx3Lo0AOZeEoOnm0Y7RaQ+3blIRESaxFub08krqSS8oxfXDokwO46ItEAqniIict5KKmt44atD\n",

"AMwbF4u7q/68iMjp9JtBRETO2xvfpHOytIpuwT5MGdTV7Dgi0kKpeIqIyHkpqqjmpa9rRzvvHheL\n",

"q4v+tIjImem3g4iInJdXNxymsLya2NAOXDWwi9lxRKQFU/EUEZFfraCsitc2HgZg/vg4XKwWkxOJ\n",

"SEum4ikiIr/aS18foriyhl6dfLm8Xyez44hIC6fiKSIiv0p+SSVLv0kHYEFiHFaNdorIOah4iojI\n",

"r/LCV2mUVdkYEO5PYp8ws+OISCug4ikiIo2WU1TBm98eAeCexDgsFo12isi5qXiKiEijPb8+jcoa\n",

"O4MjAxgTF2J2HBFpJVQ8RUSkUY4XlLNsSwYACyf01GiniDSYiqeIiDTKc+tSqbLZGdEtkAt7BJkd\n",

"R0RaERVPERFpsKMny1i5/Sig0U4RaTwVTxERabBn1qZQbTMYFRvM8G6BZscRkVZGxVNERBokPa+U\n",

"93YeA2rn7RQRaSwVTxERaZAla1Kw2Q0u6RXKoMiOZscRkVZIxVNERM4pNaeY93drtFNEzo+Kp4iI\n",

"nNOTSSkYBlzaN4x+Xf3NjiMirZSKp4iI/KL9WUV8sicLi6X2LkUiIr+WiqeIiPyiJ1f/AMAV/TvT\n",

"q5OfyWlEpDVT8RQRkbPam1nIl/uysVpg/niNdorI+VHxFBGRs1q8+iAAk+O7EhPaweQ0ItLaqXiK\n",

"iMgZ7ThyinUHc3GxWpg3LtbsOCLSBqh4iojIGf14bufUweFEB/uYnEZE2gIVTxEROc2WQ/lsTM3D\n",

"zcXC78fFmB1HRNoIFU8REanHMAyeqBvtvH5YBOEdvU1OJCJthYqniIjUsyk1n62HT+LuamXuWJ3b\n",

"KSJNR8VTREQcakc7a69knz4ikk7+niYnEpG2RMVTREQc1h/MZVdGAZ5uVn47pofZcUSkjWlU8Zw3\n",

"bx7R0dFYLBZ2794NQEVFBZMnTyYuLo6BAweSmJhIamqq4zm33HKLY91FF13Etm3bmvQDiIhI0zAM\n",

"g8V153befEE0ob4a7RSRptWo4jl16lQ2btxIVFRUveV33HEHBw8eJDk5mUmTJjF79mzHut/85jfs\n",

"27eP5ORkHnjgAa699tqmSS4iIk3qy33Z7D1WiLe7C3eM7m52HBFpgxpVPEePHk14eHi9ZZ6enkyc\n",

"OBGLxQJAQkIC6enpjvVXX301rq6ujnXHjh2jpqbmPGOLiEhTstsNx7ydt1wUTVAHD5MTiUhb5NrU\n",

"L7hkyRImTZp01nUTJ050FNEzqayspLKyst4ym83WpBlFRKS+T7/L4sCJYnw9XLl9lEY7RaR5NGnx\n",

"fOyxx0hNTWXNmjWnrXv77bdZuXIlX3/99S++xqJFi3j44YfrLUtISGjKmCIi8hM2u8FTSSkA3Daq\n",

"GwHe7iYnEpG2qsmuan/88cdZtWoVn332Gd7e9ScbXrFiBQ8//DCrV68mLCzsF1/ngQceoLCwsN5j\n",

"+PDhTRVTRER+5sPkY6TmlODv5catI7uZHUdE2rAmGfFcvHgxy5cvJykpiYCAgHrrVq5cyYMPPkhS\n",

"UhKRkZHnfC0PDw88POqfW+Ti4tIUMUVE5GdqbHaW1I123jG6O36ebiYnEpG2rFEjnnPmzCE8PJzM\n",

"zEwuvfRSYmJiyMzMZOHChRQUFDB27Fji4+MZMWKE4znTp0+noqKCSZMmER8fT3x8PPn5+U3+QURE\n",

"pPFW7TxGen4ZQT7uzLow2uw4ItLGNWrE88UXXzzjcsMwzvqc6urqxiUSERGnqKqxs2RN7WjnnRf3\n",

"wMejya83FRGpR3cuEhFpp1ZuP8qxgnJCfD2YkRB17ieIiJwnFU8RkXaootrGs2tr7zL3uzE98HLX\n",

"ufQi0vxUPEVE2qHlWzM4UVRBZ39Pbhh+7gs/RUSagoqniEg7U15l47l1aQDMvSQGTzeNdoqIc6h4\n",

"ioi0M29tTievpJLwjl5cOyTC7Dgi0o6oeIqItCMllTW88NUhAOaNi8XdVX8GRMR59BtHRKQdeeOb\n",

"dE6WVtEt2Icpg7qaHUdE2hkVTxGRdqKoopqXvq4d7bx7XCyuLvoTICLOpd86IiLtxKsbDlNYXk1s\n",

"aAeuGtjF7Dgi0g6peIqItAMFZVW8tvEwAPPHx+FitZicSETaIxVPEZF24KWvD1FcWUOvTr5c3q+T\n",

"2XFEpJ1S8RQRaePySypZ+k06AAsS47BqtFNETKLiKSLSxr3wVRplVTYGhPuT2CfM7Dgi0o6peIqI\n",

"tGE5RRW8+e0RAO5JjMNi0WiniJhHxVNEpA17fn0alTV2BkcGMCYuxOw4ItLOqXiKiLRRxwvKWbYl\n",

"A4CFE3pqtFNETKfiKSLSRj27LpUqm50R3QK5sEeQ2XFERFQ8RUTaoqMny1i57Sig0U4RaTlUPEVE\n",

"2qCn16RQYzcYFRvM8G6BZscREQFUPEVE2pzDeaWs2nUMqJ23U0SkpVDxFBFpY5Yk/YDNbnBJr1AG\n",

"RXY0O46IiIOKp4hIG5KSXcwHyccBjXaKSMuj4iki0oY8lZSCYcClfcPo19Xf7DgiIvWoeIqItBH7\n",

"jhfxyd4sLJbauxSJiLQ0Kp4iIm3Ek0k/AHBF/8706uRnchoRkdOpeIqItAF7MgtYvS8bqwXmj9do\n",

"p4i0TCqeIiJtwOLVtaOdk+O7EhPaweQ0IiJnpuIpItLK7ThyivUHc3GxWpg3LtbsOCIiZ6XiKSLS\n",

"yi1efRCAqYPDiQ72MTmNiMjZuZodQKQ1K66oZmNKHpU1dhK6B9HJ39PsSNLObD6Uz6bUfNxcLPx+\n",

"XIzZcUREfpGKp0gjHT1Zxpr92aw5kMPmQ/lU2wzHutjQDlwUE8yo2GBGdA+ig4f+iUnzMQyDxV/W\n",

"ntt5/bAIwjt6m5xIROSXNeqv4rx58/jwww85cuQIu3btIj4+noqKCm644Qb27duHl5cXoaGh/POf\n",

"/yQmpva/vHNycpg5cyZpaWl4eHjw/PPPM3r06Gb5MCLNwW432J1ZwJr92STty+FgdnG99d2CffD1\n",

"dGXvsUJSckpIySlh6TfpuFotDI7syMjYYEbGBjOgqz+uLjq7RZrOxtQ8tqafxN3VytyxOrdTRFq+\n",

"RhXPqVOncu+99zJy5Mh6y++44w4uv/xyLBYLzz77LLNnz2b9+vUA3H///SQkJPD555+zbds2fvOb\n",

"33D48GHc3Nya7EOINLWyqho2pOSRtC+bdQdzyCupcqyzWmBodCDje4cyrncYPUJqryAuKKvim7R8\n",

"NqTksTE1l6Mny9mafpKt6SdZvPoHfD1duaB7EKNigxkZG0J0kDcWi8WsjyitnGEYPFE32jl9RKRO\n",

"8xCRVqFRxfNMI5Wenp5MnDjR8XNCQgKPP/644+eVK1eSmpoKwLBhw+jSpQtfffUV48ePP+N7VFZW\n",

"UllZWW+ZzWZrTEyRXyWrsJyk/Tms2Z/NN2n5VNXYHet8PVwZ3TOE8b1DGRMXSkcf99OeH+DtzsT+\n",

"nZnYvzMAGfllbEjNZWNKHptS8yiqqOHLfdl8uS8bgK4BXnUlNJiLegSf8TVFzmbdwRx2Hy3A083K\n",

"b8f0MDuOiEiDNPkJaEuWLGHSpEkA5OfnU11dTadOnRzro6OjycjIOOvzFy1axMMPP1xvWUJCQlPH\n",

"FMFuN/jueKGjbH5/vKje+ohAL8b1CiOxTxjDogNxd23c1+SRQd5MD4pi+ogobHaDvccK2ZiSy4aU\n",

"PHZmnOJYQTn/2naUf207isUC/br4O84PHRLVEU83l6b8uNKGGIbhmLfz5guiCfXVaKeItA5NWjwf\n",

"e+wxUlNTWbNmza9+jQceeIAFCxbUW/bQQw+dbzQRACqqbWxKzSNpfw5rD2STXfTf0XWLBQZFBDC+\n",

"Txjje4cRG9qhyb4Kd7FaiI8IID4igLmXxFJaWcPW9JNsTMljY0oeB7OL2XuskL3HCnnhqzQ83awM\n",

"iw6sHRGNCaFXJ1+sVn0tL7W++D6b744V4ePuwpyLNdopIq1HkxXPxx9/nFWrVpGUlIS3d+2VlUFB\n",

"Qbi6unLixAnHqGd6ejqRkZFnfR0PDw88PDzqLXNx0ciP/Ho5xRWs3Z9D0v4cNqbmUlH936/Qvd1d\n",

"GB0bwrjeoYztFUpwB49feKWm4+PhytieoYztGVqbsaiCjam1JXRjah45xZVsSMljQ0oecIDgDu5c\n",

"FBPsGBHt7O/llJzS8tjtBk/WjXbeclE3AnWKhoi0Ik1SPBcvXszy5ctJSkoiICCg3rprr72WF154\n",

"gT//+c9s27aNY8eOcfHFFzfF24qckWEY7M8qrr0KfX82yZmF9dZ38fdkXO8wxvUOJaF7UIv4SjvU\n",

"z5Mpg8OZMjgcwzD4IbukrojmsvnQSfJKqvhg93E+2H0cgB4hPoyKDWFkTDAJPTRtU3vyyd4sDmYX\n",

"4+vpyu2jupsdR0SkUSyGYRjn3qzWnDlz+OSTTzhx4gRBQUH4+vqyfv16IiIi6N69O76+vkDtqOWW\n",

"LVsAyM7O5qabbuLw4cO4u7vz7LPPMnbs2EaFXLBgAYsXL27Uc6R9qayxsfnQSZL2ZbP2QA7HCsrr\n",

"rR8Y7u8om306+7Wqq8mrauzszDjFxpQ8NqTmsTezAPtP/tW6Wi0MigxgZEwII2ODGRiuaZvaKpvd\n",

"YMKTX5GWW8o94+O4e7ymUBKR1qVRxdMsKp5yJvkllaw9kMOa/TlsSMmltOq/sx94ulkZGRNcWzZ7\n",

"hRLq13Yuvigsq+bbQ3l10zblcSS/rN56Xw9XEnrUTdsUE0y3YJ9WVbTl7FbtzGTBymQCvN3YcO9Y\n",

"fD01LZ2ItC76fk5aDcMwSMkpIWl/Nmv257Az4xQ//c+mUF8PxvUOZXzvMC7sEYyXu/lfoTcHf283\n",

"LuvXmcv61U7bdPRkmWPu0E2p+RSWV7N6XzarfzJt08iYummbYoJ1TmArVW2zs2RNCgB3jO6u0iki\n",

"rZKKp7Ro1TY7Ww+fdJTNjJP1R/f6dParuwo9lH5d/Nvlld8Rgd5MGxHJtBGR2OwG3x0rdFyotONI\n",

"7bRNK7YfZcX2owD07eLHyNhgRsWEMDRa0za1Fqt2ZnIkv4wgH3duviDa7DgiIr+Kiqe0OAVlVaw/\n",

"mEvS/my+OphLcWWNY527i5ULY4IcX6F3CdDV3T/lYrUwMCKAgREB/G5sDGVVNWw9fNJxtfyBE8V8\n",

"f7yI748X8eJXh/BwtTK8WyAj666Y79PZr12W95auqsbO02tqb8Tx2zE98NHFZCLSSum3l7QIh3JL\n",

"WLM/h9X7s9lx5BS2n1w9E+TjziW9am9POSo2WH90G8Hb3ZUxPUMZ8+O0TcUVbErNY2NKPhtTc8ku\n",

"+um0TbX7+sKYYEbVfTWvYt8yrNh+lGMF5YT6ejAjIcrsOCIiv5r+gospamx2dhw55fgK/VBeab31\n",

"PcN8GVd3L/T4iABcNArXJEJ9PfnNoHB+M6h22qbUnBLHRUqbD+WTX1rFR8nH+Si5dtqm7iE+dSU0\n",

"hITugTqv0AQV1TaeW1s72vm7sTE6NUJEWjUVT3GaoopqvjqYy5r92aw7mEthebVjnZuLhRHdghhf\n",

"VzYjAr1NTNo+WCwWYsN8iQ3z5daR3aiqsbMr41Tt+aGpeSQfLeBQbimHckt549sjjrsvjaybxH5g\n",

"RABumrap2S3fmsGJogq6+Htyw/AIs+OIiJwXFU9pVhn5ZbWjmgey2XLoJDU/+Qo9wNuNsT1rr0If\n",

"HRes0TSTubtaGdE9iBHdg1g4oSeF5dV8m1b7lfzGlDzS88vYceQUO46cYsmaFDp4uJLQvW7apthg\n",

"umvapiZXXmXjuXVpAMy9JBYPV412ikjrpuIpTcpmN9h99BRJ+3NYsz+bH7JL6q3vEeLD+N5hjOsd\n",

"xuDIAE103oL5e7lxWb9OXNav9na3R0+WOa6W35SWR0FZNUl1d4eC2jtCXVR3bujImGCCnHT70bbs\n",

"rc3p5JVUEhHoxbVDw82OIyJy3lQ85byVVtawISWXpP05rDuQQ35plWOdi9XCsOiOjrLZLdjHxKRy\n",

"PiICvblxeCQ3Do/Ebjf4/ngRG+pGQ7enn+J4YQX/3pHJv3dkArVTXf04GjosOlDnJjZSSWUNL3x1\n",

"CIB5l8TqtAYRaRNUPOVXOVZQztr92azen8PmtHyqbHbHOl/P2iupx/cOZUxcKP7e+gq9rbFaLfQP\n",

"96d/uD93jYmhvMrG1vSTbEzJZUNK7bRN+7KK2JdVxItfH8Ld1cqw6I6MjAlhVKymbWqIN75J52Rp\n",

"Fd2DffjNoK5mxxERaRIqntIgdrvB3mOFdV+t5rA/q6je+qggb8b1qp3IfVi3QI3OtDNe7i5cHBfC\n",

"xXEhAOQWV/JNWt1tPVPyOFFUwabUfDal5vN/n0OgjzsX/nhbz9gQumrapnqKKqp56eva0c67x8fq\n",

"lBQRaTNUPOWsyqtsbEzNY83+bNYcyCG3uNKxzmqBwZEdGdc7jMQ+ofQI6aALS8QhxNeDSfFdmRTf\n",

"FcMwSMutnbZpU2oe36blc7K0io/3ZPHxniwAugf7OG7peUGPIPza+YVmr244TGF5NbGhHbhyQBez\n",

"44iINBkVT6knu6iCNXUXBm1MzaOy5r9fofu4u3BxzxDG9QpjbK9Q3fNbGsRisRAT6ktMqC+3XNSN\n",

"apud3UcL6kZDc0nOLORQXimH8kp5s27apoHh/oyMrf1aPr6dTdtUUFbFaxsPA3BPYpzmsBWRNkXF\n",

"s50zjNqLRNbsz2HNgWz2ZBbWW981wMsxt+aI7oGazkXOm5uLlWHRgQyLDmRBYhxFFXXTNtWNiB7K\n",

"K2VnRgE7Mwp42jFtUyAX1c0f2tZH11/6+hDFlTX07uzHZX07mR1HRKRJqXi2QxXVNr49lF/7Ffr+\n",

"HLIKK+qtj48IcJTNXp182/QfeTGfn6cbl/btxKV1JSvzVBmbUvMcX82fKqsmaX8OSftzAOhcN23T\n",

"qLqv5oPb0LRN+SWVLP0mHYAFiXG6AEtE2hwVz3Yir6SStQdySNpX+xV6WZXNsc7LzYWRscGM7x3K\n",

"2F6hhPp6mphU2rvwjt5cPyyS64fVTtu0L6uo7raeuWxLP0VWYQXv7sjk3bppm3rXTdt0UUwww6MD\n",

"8XJvvaPyL3yVRlmVjYHh/ozvHWp2HBGRJqfi2UYZhsEP2SWOCb53Hy3A+O9Ngwjz86i9MKh3GBf0\n",

"CNIci9IiWa0W+nX1p19Xf347pgcV1Ta2pZ9kY0rtiOi+rCL21z1eqpu2aWhUR0bGBjMqJoS+XVrP\n",

"tE05RRW8+e0RoPbcTn3TICJtkYpnG1JVY2fL4XzW7M8haX82mafK663v19WPcb3CSOwTRt8ufvrD\n",

"Jq2Op5sLo2JDGBUbwgPUjuRvqrub0sbUPLIKK/gmLZ9v0vL5Owfp6O3GhTHBjIqpHRGNCPQ2+yOc\n",

"1fPr06issTMkqqNjWioRkbZGxbOVO1VaxbqDOazZn8NXP+RSUlnjWOfuauWiHkGM7xPGuF5hdPLX\n",

"V+jStgR3qD9t06G8Usdo6OZD+Zwqq+aTPVl8UjdtU3SQd90tPUO4oEcQ/l4tY9qm4wXlLNuSAcBC\n",

"jXaKSBum4tnK1M6JWOq4MGj7kZPYf/IVenAHD8b1CmVc71BGxgbj7a7/i6V9sFgs9AjpQI+QDtx8\n",

"YTTVNjvJP07blJrH7qMFpOeXkZ6fwdubM7BaYGBEAKNiaiexj48IwN3VnGmbnl2XSpXNTkL3QC6M\n",

"CTYlg4iIM6iVtALVNjvb00+RtD+bNfuzSc8vq7e+VyffunuhhzIwPKDVnNMm0pzcXKwMjQ5kaHQg\n",

"99RN27TlUN1tPVPzOJRbyq6MAnZlFPD02lR83F0Y0T2IkXVXzMeEOmfapqMny1i57SgACyf0bPb3\n",

"ExExk4pnC1VYXs1XP+SStC+b9QdzKKr471fobi4WEroHOcpmeMeWe96aSEvh5+lGYp/ac5wBjhWU\n",

"sykljw2ptdM2nSytYu2BHNYeqJ22qZNf/WmbQnybZ9qmp9ekUGM3GBUbzLDowGZ5DxGRlkLFswVJ\n",

"zyutG9XMYVv6SWp+8h16R283xvYKJbF3GKPiQujgof/rRM5H1wAvrhsWwXXDIhzTNm1Krf1afuvh\n",

"k5woquC9nZm8t7N22qZenXwZGRPMyNhgRnQLapJpmw7nlbJq1zFAo50i0j6ovZjIZjfYmXHKUTZT\n",

"c0rqrY8J7cD43mGM7x3KoMiOunWeSDP56bRNcy6unbZpe/opNqTmsjElj++PF3HgRDEHThTzysbD\n",

"uLtYGfLjtE2xwfTt4v+r/n0uSfoBm91gXK9Q4iMCmv6DiYi0MCqeTlZcUc2GlDyS9mez7kAOp8qq\n",

"HetcrRaGdwtkXF3ZjAryMTGpSPvlWXdThZGxwXB57R2FNqXls6nuQqVjBeV8eyifbw/l848vDhLg\n",

"7caFPYIYGVN7f/mGTNuUkl3MB8nHgdp5O0VE2gMVTyfIPFXmmFtz86F8qm3//Qrdz9OVsb1qb095\n",

"cVxIi5neRUT+K6iDB1cP7MLVA7tgGAaH80rZWHdbz81p+RSUVfPp3hN8uvcEAFFB3o6LlC7oEXzG\n",

"f9dPJaVgGHBZ30706+rv7I8kImIKFc9mYLcbJGcWOMrmgRPF9dZ3C/apm/IojKHRHXFzMWcKFxFp\n",

"PIvFQveQDnQP6cDMC6KpsdlJzixgY0o+G1Nz2ZVRwJH8Mo7kZ/DOltppmwaEBzjODx0c2ZHUnBI+\n",

"2ZuFxaLRThFpX1Q8m0hZVQ0bUvJYsz+btQdyySupdKyzWmBoVCDjeocyvk8YPUI6mJhURJqSq4uV\n",

"IVGBDIkK5O7xsRT/OG1Tah4bUnJJyy1l99ECdh8t4Nl1qXi7uzhGQK8c0IWenXxN/gQiIs6j4nke\n",

"sgrLWbM/hzX7s9mUlk9Vjd2xroOHKxfHhTC+Tyhj4kLp6ONuYlIRcRZfTzfG9wljfN20TVmF5bWT\n",

"2KfUTtuUX1pFWZUNqwXuHhdrcloREedS8WwEwzD47lhR7VXoB7L57lhRvfXhHb3qrkIPY3i3QNPu\n",

"giIiLUdnfy+uGxrBdUNrp206cKKYbw/lEx3kTUyovv0QkfalUcVz3rx5fPjhhxw5coRdu3YRHx//\n",

"i8sBPv30Ux588EHsdjs1NTX8z//8DzfffHNTfoZmVVFt45u0PJL257B2fw4niioc6ywWiI8IcJTN\n",

"uDDn3OlERFonq9VCny5+9OniZ3YUERFTNKp4Tp06lXvvvZeRI0c2aLlhGMyYMYP169czYMAA0tPT\n",

"6dWrF1OmTMHXt+We15RTXMG6Azms3pfDptQ8yqttjnXe7i6Mig1mXO8wLukVSnCH5rmbiYiIiEhb\n",

"06jiOXr06EYth9orQAsKCgAoKioiKCgID4+WWdbKq2zc8PJmko8W1Fve2d+Tcb1rr0K/oHsQnm7n\n",

"f8cSERERkfamWc/xtFgsrFixgilTpuDj48OpU6dYtWoV7u5nv9CmsrKSysrKestsNttZtm5aXu4u\n",

"VNaNbg4I92dcrzDG9wmlT2c/fYUuIiIicp6atXjW1NTwyCOPsGrVKkaPHs22bdu4+uqr2bt3L8HB\n",

"wWd8zqJFi3j44YfrLUtISGjOmPX8feoAwvw8CfPzdNp7ioiIiLQHzXrZ9e7duzl+/Ljjq/hhw4YR\n",

"Hh7Orl27zvqcBx54gMLCwnqP4cOHN2fMegaEB6h0ioiIiDSDZh3xjIiIICsri/3799O7d29SU1NJ\n",

"S0ujZ8+eZ32Oh4fHaeeAurjonEoRERGR1q5RxXPOnDl88sknnDhxgksvvRRfX19SU1PPujwsLIyX\n",

"XnqJ6667DqvVit1u59lnnyUyMrK5Po+IiIiItFAWwzAMs0Ocy4IFC1i8eLHZMURERETkPOjWOiIi\n",

"IiLiFCqeIiIiIuIUKp4iIiIi4hQqniIiIiLiFCqeIiIiIuIUKp4iIiIi4hQqniIiIiLiFCqeIiIi\n",

"IuIUrWIC+SlTphAdHe2U97LZbGzdupXhw4frVp0/o31zZtovZ6d9c2baL2em/XJ22jdnpv1ydmbs\n",

"m6ioKO6+++5f3KZVFE9nKioqwt/fn8LCQvz8/MyO06Jo35yZ9svZad+cmfbLmWm/nJ32zZlpv5xd\n",

"S903+qpdRERERJxCxVNEREREnELFU0REREScQsXzZzw8PPjTn/6Eh4eH2VFaHO2bM9N+OTvtmzPT\n",

"fjkz7Zez0745M+2Xs2up+0YXF4mIiIiIU2jEU0REREScQsVTRERERJxCxVNEREREnKLdFs/o6Gh6\n",

"9uxJfHw88fHxrFix4ozbvfrqq8TGxtKjRw9uv/12qqurnZzU+Rqyb9avX4+Xl5djm/j4eMrLy01I\n",

"6zyVlZXMnTuX2NhY+vfvz4wZM864XXs7ZhqyX9rj8ZKfn1/v88bFxeHq6srJkydP2/bjjz+mV69e\n",

"xMbGMmXKFIqKikxI7BwN3S/p6em4uLjU2zYtLc2k1M7z6aefMnjwYOLj4+nXrx9vvPHGGbdrT8cM\n",

"NGy/tNdj5vPPP2fo0KEMGDCAhIQEkpOTz7hdizlmjHYqKirK2LVr1y9uc+jQIaNz585GVlaWYbfb\n",

"jauuusp49tlnnRPQRA3ZN+vWrTMGDhzolDwtxfz58425c+cadrvdMAzDyMrKOm2b9njMNGS/tMfj\n",

"5ef+8Y9/GFdeeeVpy4uLi43Q0FBj//79hmEYxu9+9zvjD3/4g7PjmeZs++Xw4cOGv7+/8wOZyG63\n",

"Gx07djSSk5MNw6jdBx4eHkZRUVG97drbMdPQ/dIej5mTJ08agYGBxnfffWcYhmF8/fXXRt++fU/b\n",

"riUdM+12xLMh3n33Xa6++mo6deqExWLhzjvvZPny5WbHEhOUlpby6quv8uijj2KxWADo1KnTadu1\n",

"t2OmoftFakfCb7vtttOWf/bZZwwaNIhevXoBcNddd7XpY+bnzrZf2iuLxUJBQQFQe8vDoKCg06bD\n",

"aY/HTEP2S3uUlpZGUFAQffv2BWDUqFFkZGSwc+fOetu1pGOmXRfPmTNn0r9/f2677TZyc3NPW5+R\n",

"kUFUVJTj5+joaDIyMpwZ0TTn2jdQe8APHjyYYcOG8fzzzzs5oXOlpaURGBjIY489xtChQxk1ahRr\n",

"1qw5bbv2dsw0dL/8uG17OV5+7ptvvuHUqVNceeWVp6070zGTlZVFTU2NMyOa4pf2C9T+h82wYcMY\n",

"PHgwf/nLX7DZbE5O6FwWi4UVK1YwZcoUoqKiGDlyJG+88Qbu7u71tmtvx0xD9wu0v2MmNjaW/Px8\n",

"vvnmGwA+/PBDiouLSU9Pr7ddSzpm2m3x/Prrr9mzZw87d+4kODiYm2++2exILUZD9s3gwYPJzMxk\n",

"586d/Oc//+GFF15g5cqVJqR1jpqaGo4cOUKfPn3Yvn07Tz/9NNdffz3Z2dlmRzNVQ/dLeztefu7V\n",

"V19l5syZuLq6mh2lRfml/dK5c2eOHTvGtm3bSEpKYsOGDTzxxBMmpHSempoaHnnkEVatWsWRI0dY\n",

"s2YNN910E3l5eWZHM1VD90t7PGb8/f159913eeCBBxgyZAhffvklffr0adG/a9pt8YyMjATAzc2N\n",

"+fPns2HDhjNuc+TIEcfP6enpjue1ZQ3ZN35+fvj7+wMQHh7OjTfeeMbt2orIyEisVivTp08HYNCg\n",

"QXTr1o29e/eetl17OmYaul/a2/HyUyUlJaxcuZJbb731jOvPdMx07ty5Rf/haArn2i8eHh6EhoYC\n",

"EBgYyK233trmj5ndu3dz/PhxRo8eDcCwYcMIDw9n165d9bZrb8dMQ/dLezxmAMaOHctXX33Fjh07\n",

"eOKJJzh+/Dh9+vSpt01LOmbaZfEsLS11nCsCsHz5cgYNGnTadtdccw0ffvghJ06cwDAMXnjhBW64\n",

"4QYnJnW+hu6brKws7HY7AMXFxXz88cdn3K6tCA4OZty4cXzxxRcAHD58mMOHD9O7d+9627W3Y6ah\n",

"+6W9HS8/tWLFCgYOHOg4t+rnLrvsMnbu3MmBAwcAeP7559v0MfOjc+2XnJwcx4wQlZWVrFq1qs0f\n",

"MxEREWRlZbF//34AUlNTSUtLo2fPnvW2a2/HTEP3S3s8ZqD29+uP/vrXv3LJJZcQExNTb5sWdcyY\n",

"ckmTydLS0oz4+Hijf//+Rr9+/Yyrr77aOHz4sGEYhnHbbbcZH3zwgWPbl156yejevbvRvXt349Zb\n",

"bzWqqqpMSu0cDd03zzzzjNGnTx9jwIABRp8+fYw//elPjqua26q0tDRjzJgxRr9+/YwBAwYY7777\n",

"rmEYOmYasl/a4/HyowsuuMB47bXX6i176KGHjH/+85+Onz/44AOjZ8+eRo8ePYxJkyYZBQUFzo7p\n",

"dOfaL++9957Rt29fxzEzd+5co6KiwoyoTrVs2TLHv6V+/foZ77zzjmEYOmYasl/a6zEze/Zsx7Ew\n",

"Y8YM49SpU4ZhtNxjRvdqFxERERGnaJdftYuIiIiI86l4ioiIiIhTqHiKiIiIiFOoeIqIiIiIU6h4\n",

"ioiIiIhTqHiKiIiItCBPP/00/fr1o3///gwYMIC33377nM9Zu3YtLi4uPPXUU45lKSkpJCYmMnDg\n",

"QPr27cuKFSsc67Kzs5kyZQoDBgygd+/e9Z7XEDk5OYSFhTF58uRGPU/FU0RERMQkY8aMOe3e6n37\n",

"9mXTpk3s3buXTz75hPnz55OWlnbW1ygsLOT+++9n4sSJ9ZbPmjWL66+/nuTkZNavX8+9997LsWPH\n",

"AFiwYAF9+vRhz549bN++naVLl7Jt27YG554zZw5XXnllwz9oHRVPERERkRZk3LhxjtsMR0RE0KlT\n",

"J44ePXrW7efOncuDDz5IUFBQveXJycmOMhoSEsLAgQMdo54/Xefj48Po0aN56623AKiurub+++9n\n",

"+PDhxMfHc91113Hq1CnH67766qt069aNUaNGNfqzqXiKiIiItFBJSUmcOnWKYcOGnXH9u+++i9Vq\n",

"5eqrrz5t3ZAhQxxf0x86dIhvvvnGMbo6ZMgQli1bht1uJzc3ly+++MKx7h//+Ac+Pj5s3bqV3bt3\n",

"079/fx588EGg9tbIL7zwAo8++uiv+jzOvzu8iIiISDs2c+ZM9uzZA9Tee37ixIm4u7sD8P777xMd\n",

"HQ3A3r17ueWWW1ixYgU+Pj6nvc6JEyd45JFHWL9+/Rnf54033mDhwoXEx8cTFRXFuHHjcHWtrX5P\n",

"PPEEf/jDHxg0aBChoaGMGTOG3NxcR4bCwkLee+89AKqqqoiOjsYwDG699VaeffZZvLy8ftVn1y0z\n",

"RUREREwyZswYli5d6iibP9q3bx+XX345r7zyComJiWd87ieffMKtt97qKIF5eXm4u7vz29/+9owj\n",

"kpdddhnXXnstt91222nr7rzzTkJCQvjrX//KsGHDePTRR5kwYUK9bQoLC+nevTu+vr4AlJSUUFZW\n",

"xgUXXMCaNWsa9Hk14ikiIiLSguzfv5+JEyfy0ksvnbV0AlxxxRVkZ2c7fp41axbx8fHMnz8fqL1y\n",

"PSQkBKvVyhdffMG+ffuYNm0aAPn5+fj5+eHm5sauXbt4//332bVrFwCTJ0/mySefZOTIkXh7e1NW\n",

"Vsbhw4fp27cv+fn5jvdbunQp77//Pu+//36DP5vO8RQRERFpQebNm0dhYSH33Xcf8fHxxMfH88UX\n",

"XwCwffv2065eP5uPPvqIuLg4evbsyd/+9jc+/fRTx+jo1q1b6dOnD71792bOnDmsXLmSzp07A3Df\n",

"ffcxbNgwRowYwYABA0hISGD37t1N8tn0VbuIiIiIOIVGPEVERETEKVQ8RURERMQpVDxFRERExClU\n",

"PEVERETEKVQ8RURERMQpVDxFRERExClUPEVERETEKVQ8RURERMQpVDxFRERExClUPEVERETEKVQ8\n",

"RURERMQp/j/abUwPYZdDxQAAAABJRU5ErkJggg==\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-7bc6d455-b503-47a4-ae5b-0c628371eeef\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-7bc6d455-b503-47a4-ae5b-0c628371eeef\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

}

]

},

{

"cell\_type": "code",

"source": [

"data.describe()"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/",

"height": 771

},

"id": "Y\_WgA1DhJZvD",

"outputId": "5192e13e-9f4b-4818-8bd7-0f118ab536ab"

},

"execution\_count": 6,

"outputs": [

{

"output\_type": "execute\_result",

"data": {

"text/plain": [

" Index Height(Inches) Weight(Pounds)\n",

"count 25000.000000 25000.000000 25000.000000\n",

"mean 12500.500000 67.993114 127.079421\n",

"std 7217.022701 1.901679 11.660898\n",

"min 1.000000 60.278360 78.014760\n",

"25% 6250.750000 66.704397 119.308675\n",

"50% 12500.500000 67.995700 127.157750\n",

"75% 18750.250000 69.272958 134.892850\n",

"max 25000.000000 75.152800 170.924000"

],

"text/html": [

"\n",

" <div id=\"df-a4809f46-7eab-4f3b-b81d-8bf483a1d8da\" class=\"colab-df-container\">\n",

" <div>\n",

"<style scoped>\n",

" .dataframe tbody tr th:only-of-type {\n",

" vertical-align: middle;\n",

" }\n",

"\n",

" .dataframe tbody tr th {\n",

" vertical-align: top;\n",

" }\n",

"\n",

" .dataframe thead th {\n",

" text-align: right;\n",

" }\n",

"</style>\n",

"<table border=\"1\" class=\"dataframe\">\n",

" <thead>\n",

" <tr style=\"text-align: right;\">\n",

" <th></th>\n",

" <th>Index</th>\n",

" <th>Height(Inches)</th>\n",

" <th>Weight(Pounds)</th>\n",

" </tr>\n",

" </thead>\n",

" <tbody>\n",

" <tr>\n",

" <th>count</th>\n",

" <td>25000.000000</td>\n",

" <td>25000.000000</td>\n",

" <td>25000.000000</td>\n",

" </tr>\n",

" <tr>\n",

" <th>mean</th>\n",

" <td>12500.500000</td>\n",

" <td>67.993114</td>\n",

" <td>127.079421</td>\n",

" </tr>\n",

" <tr>\n",

" <th>std</th>\n",

" <td>7217.022701</td>\n",

" <td>1.901679</td>\n",

" <td>11.660898</td>\n",

" </tr>\n",

" <tr>\n",

" <th>min</th>\n",

" <td>1.000000</td>\n",

" <td>60.278360</td>\n",

" <td>78.014760</td>\n",

" </tr>\n",

" <tr>\n",

" <th>25%</th>\n",

" <td>6250.750000</td>\n",

" <td>66.704397</td>\n",

" <td>119.308675</td>\n",

" </tr>\n",

" <tr>\n",

" <th>50%</th>\n",

" <td>12500.500000</td>\n",

" <td>67.995700</td>\n",

" <td>127.157750</td>\n",

" </tr>\n",

" <tr>\n",

" <th>75%</th>\n",

" <td>18750.250000</td>\n",

" <td>69.272958</td>\n",

" <td>134.892850</td>\n",

" </tr>\n",

" <tr>\n",

" <th>max</th>\n",

" <td>25000.000000</td>\n",

" <td>75.152800</td>\n",

" <td>170.924000</td>\n",

" </tr>\n",

" </tbody>\n",

"</table>\n",

"</div>\n",

" <div class=\"colab-df-buttons\">\n",

"\n",

" <div class=\"colab-df-container\">\n",

" <button class=\"colab-df-convert\" onclick=\"convertToInteractive('df-a4809f46-7eab-4f3b-b81d-8bf483a1d8da')\"\n",

" title=\"Convert this dataframe to an interactive table.\"\n",

" style=\"display:none;\">\n",

"\n",

" <svg xmlns=\"http://www.w3.org/2000/svg\" height=\"24px\" viewBox=\"0 -960 960 960\">\n",

" <path d=\"M120-120v-720h720v720H120Zm60-500h600v-160H180v160Zm220 220h160v-160H400v160Zm0 220h160v-160H400v160ZM180-400h160v-160H180v160Zm440 0h160v-160H620v160ZM180-180h160v-160H180v160Zm440 0h160v-160H620v160Z\"/>\n",

" </svg>\n",

" </button>\n",

"\n",

" <style>\n",

" .colab-df-container {\n",

" display:flex;\n",

" gap: 12px;\n",

" }\n",

"\n",

" .colab-df-convert {\n",

" background-color: #E8F0FE;\n",

" border: none;\n",

" border-radius: 50%;\n",

" cursor: pointer;\n",

" display: none;\n",

" fill: #1967D2;\n",

" height: 32px;\n",

" padding: 0 0 0 0;\n",

" width: 32px;\n",

" }\n",

"\n",

" .colab-df-convert:hover {\n",

" background-color: #E2EBFA;\n",

" box-shadow: 0px 1px 2px rgba(60, 64, 67, 0.3), 0px 1px 3px 1px rgba(60, 64, 67, 0.15);\n",

" fill: #174EA6;\n",

" }\n",

"\n",

" .colab-df-buttons div {\n",

" margin-bottom: 4px;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-convert {\n",

" background-color: #3B4455;\n",

" fill: #D2E3FC;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-convert:hover {\n",

" background-color: #434B5C;\n",

" box-shadow: 0px 1px 3px 1px rgba(0, 0, 0, 0.15);\n",

" filter: drop-shadow(0px 1px 2px rgba(0, 0, 0, 0.3));\n",

" fill: #FFFFFF;\n",

" }\n",

" </style>\n",

"\n",

" <script>\n",

" const buttonEl =\n",

" document.querySelector('#df-a4809f46-7eab-4f3b-b81d-8bf483a1d8da button.colab-df-convert');\n",

" buttonEl.style.display =\n",

" google.colab.kernel.accessAllowed ? 'block' : 'none';\n",

"\n",

" async function convertToInteractive(key) {\n",

" const element = document.querySelector('#df-a4809f46-7eab-4f3b-b81d-8bf483a1d8da');\n",

" const dataTable =\n",

" await google.colab.kernel.invokeFunction('convertToInteractive',\n",

" [key], {});\n",

" if (!dataTable) return;\n",

"\n",

" const docLinkHtml = 'Like what you see? Visit the ' +\n",

" '<a target=\"\_blank\" href=https://colab.research.google.com/notebooks/data\_table.ipynb>data table notebook</a>'\n",

" + ' to learn more about interactive tables.';\n",

" element.innerHTML = '';\n",

" dataTable['output\_type'] = 'display\_data';\n",

" await google.colab.output.renderOutput(dataTable, element);\n",

" const docLink = document.createElement('div');\n",

" docLink.innerHTML = docLinkHtml;\n",

" element.appendChild(docLink);\n",

" }\n",

" </script>\n",

" </div>\n",

"\n",

"\n",

"<div id=\"df-c35c2f61-6bda-47ce-8503-dfb16081dcac\">\n",

" <button class=\"colab-df-quickchart\" onclick=\"quickchart('df-c35c2f61-6bda-47ce-8503-dfb16081dcac')\"\n",

" title=\"Suggest charts\"\n",

" style=\"display:none;\">\n",

"\n",

"<svg xmlns=\"http://www.w3.org/2000/svg\" height=\"24px\"viewBox=\"0 0 24 24\"\n",

" width=\"24px\">\n",

" <g>\n",

" <path d=\"M19 3H5c-1.1 0-2 .9-2 2v14c0 1.1.9 2 2 2h14c1.1 0 2-.9 2-2V5c0-1.1-.9-2-2-2zM9 17H7v-7h2v7zm4 0h-2V7h2v10zm4 0h-2v-4h2v4z\"/>\n",

" </g>\n",

"</svg>\n",

" </button>\n",

"\n",

"<style>\n",

" .colab-df-quickchart {\n",

" --bg-color: #E8F0FE;\n",

" --fill-color: #1967D2;\n",

" --hover-bg-color: #E2EBFA;\n",

" --hover-fill-color: #174EA6;\n",

" --disabled-fill-color: #AAA;\n",

" --disabled-bg-color: #DDD;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-quickchart {\n",

" --bg-color: #3B4455;\n",

" --fill-color: #D2E3FC;\n",

" --hover-bg-color: #434B5C;\n",

" --hover-fill-color: #FFFFFF;\n",

" --disabled-bg-color: #3B4455;\n",

" --disabled-fill-color: #666;\n",

" }\n",

"\n",

" .colab-df-quickchart {\n",

" background-color: var(--bg-color);\n",

" border: none;\n",

" border-radius: 50%;\n",

" cursor: pointer;\n",

" display: none;\n",

" fill: var(--fill-color);\n",

" height: 32px;\n",

" padding: 0;\n",

" width: 32px;\n",

" }\n",

"\n",

" .colab-df-quickchart:hover {\n",

" background-color: var(--hover-bg-color);\n",

" box-shadow: 0 1px 2px rgba(60, 64, 67, 0.3), 0 1px 3px 1px rgba(60, 64, 67, 0.15);\n",

" fill: var(--button-hover-fill-color);\n",

" }\n",

"\n",

" .colab-df-quickchart-complete:disabled,\n",

" .colab-df-quickchart-complete:disabled:hover {\n",

" background-color: var(--disabled-bg-color);\n",

" fill: var(--disabled-fill-color);\n",

" box-shadow: none;\n",

" }\n",

"\n",

" .colab-df-spinner {\n",

" border: 2px solid var(--fill-color);\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" animation:\n",

" spin 1s steps(1) infinite;\n",

" }\n",

"\n",

" @keyframes spin {\n",

" 0% {\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" border-left-color: var(--fill-color);\n",

" }\n",

" 20% {\n",

" border-color: transparent;\n",

" border-left-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" }\n",

" 30% {\n",

" border-color: transparent;\n",

" border-left-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" border-right-color: var(--fill-color);\n",

" }\n",

" 40% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" }\n",

" 60% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" }\n",

" 80% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" border-bottom-color: var(--fill-color);\n",

" }\n",

" 90% {\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" }\n",

" }\n",

"</style>\n",

"\n",

" <script>\n",

" async function quickchart(key) {\n",

" const quickchartButtonEl =\n",

" document.querySelector('#' + key + ' button');\n",

" quickchartButtonEl.disabled = true; // To prevent multiple clicks.\n",

" quickchartButtonEl.classList.add('colab-df-spinner');\n",

" try {\n",

" const charts = await google.colab.kernel.invokeFunction(\n",

" 'suggestCharts', [key], {});\n",

" } catch (error) {\n",

" console.error('Error during call to suggestCharts:', error);\n",

" }\n",

" quickchartButtonEl.classList.remove('colab-df-spinner');\n",

" quickchartButtonEl.classList.add('colab-df-quickchart-complete');\n",

" }\n",

" (() => {\n",

" let quickchartButtonEl =\n",

" document.querySelector('#df-c35c2f61-6bda-47ce-8503-dfb16081dcac button');\n",

" quickchartButtonEl.style.display =\n",

" google.colab.kernel.accessAllowed ? 'block' : 'none';\n",

" })();\n",

" </script>\n",

"</div>\n",

"\n",

" </div>\n",

" </div>\n"

],

"application/vnd.google.colaboratory.intrinsic+json": {

"type": "dataframe",

"summary": "{\n \"name\": \"data\",\n \"rows\": 8,\n \"fields\": [\n {\n \"column\": \"Index\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 9009.81615708628,\n \"min\": 1.0,\n \"max\": 25000.0,\n \"num\_unique\_values\": 6,\n \"samples\": [\n 25000.0,\n 12500.5,\n 18750.25\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n },\n {\n \"column\": \"Height(Inches)\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 8818.193208464669,\n \"min\": 1.9016787712056105,\n \"max\": 25000.0,\n \"num\_unique\_values\": 8,\n \"samples\": [\n 67.99311359679999,\n 67.9957,\n 25000.0\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n },\n {\n \"column\": \"Weight(Pounds)\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 8800.119877407515,\n \"min\": 11.660897563604278,\n \"max\": 25000.0,\n \"num\_unique\_values\": 8,\n \"samples\": [\n 127.07942116080001,\n 127.15775,\n 25000.0\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n }\n ]\n}"

}

},

"metadata": {},

"execution\_count": 6

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x786710ed28c0>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">Distributions</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_22['Index'].plot(kind='hist', bins=20, title='Index')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-b2fce110-cec4-4742-b4f8-ce3498258909\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAlG0lEQVR4nO3de1DVdeL/8dcJ7GQtl7wQ1PFAglBeAk7B+tW2y844UV9DQ5t0\n",

"s/XGxcqxxnZsGWtLuuDOVpu7O44YrFs5qxXixthUk1tt2EU0o1otE/R40AVxugCZEZfP7w9/nW9n\n",

"ueghPsA7no+Zzwzn8/6cz3mfN+g855wPHIdlWZYAAAAMc9ZATwAAAKA3iBgAAGAkIgYAABiJiAEA\n",

"AEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAEaaN2+eFixYMNDTADCAiBgAA+Kaa67R\n",

"fffdN9DTAGAwIgYAABiJiAEw4OLi4lRQUKAbbrhBYWFhio+P19atWwOO+cMf/iC3263IyEhlZ2fr\n",

"u+++Cxj/6quvdPvttys2NlYjR47UDTfcoIMHD0qSPvnkE4WHh+vFF1/0H3/77bfriiuuUEtLi/1P\n",

"EIAtiBgAg0JxcbEefvhhNTY26s4779T8+fPV1NQkSfr73/+uRx99VJs3b9bx48eVnp4eEDmWZemm\n",

"m25SU1OTPvjgA/3nP//RpEmTNH36dLW2turSSy9VSUmJ5s+fr+rqaj377LN6/vnnVVpaKqfTOVBP\n",

"GcCPRMQAGBSys7Pl8Xh01llnKS8vT83Nzfrkk08kSRs2bNCiRYs0ZcoUDRs2TLm5ubrsssv89/3g\n",

"gw/09ttvq6ioSCNGjJDT6dSjjz6qQ4cOaefOnZKkm2++WYsXL9b06dN1xx13aOPGjYqLixuIpwqg\n",

"jxAxAAaFCy+80P/1eeedJ0lqbm6WJB05ckQXX3xxwPE/vH3gwAG1tbXJ5XIpMjJSkZGRGjlypCSp\n",

"trbWf9xdd92l6upqTZo0Sddff71tzwVA/yBiAAx6LpdLXq83YN8Pb0dHR+vss8/W8ePH9dVXX/m3\n",

"kydPau7cuZKk1tZWzZ07V7NmzZLX69Vf/vKXfnwGAOxAxAAY9ObPn6+//vWveu+999TW1qbi4mJ9\n",

"+OGH/vErr7xSEydO1O23366GhgZJ0pdffqktW7bom2++kST95je/0cmTJ/X000/rueee07333ut/\n",

"qwmAmYgYAIPerbfeqhUrVujmm2/WqFGj9N577+mmm27yj4eEhOi1117Tueeeq5///OcKCwtTcnKy\n",

"tm7dKofDoc2bN2vjxo3asmWLzjnnHP3iF79QQUGBZs+erePHjw/gMwPwYzgsy7IGehIAAADB4pUY\n",

"AABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEb6yUfMmjVrBnoKAADABj/5iDl8\n",

"+PBATwEAANjgJx8xAADgp4mIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAk\n",

"IgYAABiJiAEAAEYiYgAAgJGIGAAAYCTbIubbb7/VzJkzlZiYqOTkZE2bNk3V1dVdHrtt2zZdcskl\n",

"GjdunLKystTU1HRGYwAAYOiy9ZWY3Nxc7d+/Xx9++KFmzJih7OzsTsd8/fXXWrx4sf7xj3/owIED\n",

"uvDCC/XQQw+ddgwAAAxttkXMOeecoxtuuEEOh0OSNHnyZHm93k7Hvfzyy0pNTdUll1wiSbrjjju0\n",

"adOm0451paWlRU1NTQFbe3t7Hz8zAAAwGIT21wOtWbNGM2bM6LTf5/MpNjbWfzsuLk51dXVqa2vr\n",

"cSw0tPPUCwsLtWrVqoB9kydP7sNngZ+SuN++ZNu5vav/17Zz4//Y9T3k+4efmp/qv5V+ubD30Ucf\n",

"VXV1tQoLC219nPz8fDU2NgZs6enptj4mAAAYGLZHzGOPPaaysjK9/PLLOvfcczuNu91uHT582H/b\n",

"6/UqJiZGoaGhPY51xel0Kjw8PGALCQnp+ycFAAAGnK0R88QTT2jTpk167bXXFBkZ2eUxGRkZ2rNn\n",

"jz799FNJ0tq1azVnzpzTjgEAgKHNtmtijhw5onvuuUdjx47VtddeK+nUKyU7d+7U7373O1144YVa\n",

"smSJwsLCVFxcrJkzZ6qtrU0TJ07U008/LUk9jgEAgKHNtohxuVyyLKvLsYKCgoDbmZmZyszM7PLY\n",

"nsYAAMDQxV/sBQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEA\n",

"AEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgA\n",

"AGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgB\n",

"AABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCRbI2bZsmWKi4uTw+FQVVVVl8ds\n",

"2LBBKSkp/m3UqFHKysqSJHm9XoWEhASM19TU2DllAABgiFA7Tz579mytWLFCV155ZbfHLFy4UAsX\n",

"LvTfnjhxom699Vb/7bCwsG4DCAAADF22RsxVV10V1PE7d+5UQ0ODMjMze/V4LS0tamlpCdjX3t7e\n",

"q3MBAIDBbVBdE1NSUqLbbrtNw4YN8+87ceKE0tLS5PF4VFBQ0GOUFBYWKiIiImCrrKzsj6kDAIB+\n",

"Nmgi5sSJE9q8ebMWL17s3xcTE6OjR49q165d2r59uyoqKvT44493e478/Hw1NjYGbOnp6f0xfQAA\n",

"0M8GTcS88MILmjBhgsaPH+/f53Q6FRUVJUkaMWKEFi1apIqKim7P4XQ6FR4eHrCFhITYPncAAND/\n",

"Bk3ElJSUBLwKI0kNDQ1qbW2VdOp6l7KyMqWmpg7E9AAAwCBja8Tk5eXJ5XLpyJEjuu6665SQkCBJ\n",

"ys7OVnl5uf+4/fv3q6qqSrfcckvA/Xfs2KHU1FQlJyfL4/EoOjpaK1eutHPKAADAELb+dlJRUVGX\n",

"+4uLiwNuJyUlqbm5udNxWVlZ/r8ZAwAA8EOD5u0kAACAYBAxAADASEQMAAAwEhEDAACMRMQAAAAj\n",

"ETEAAMBIRAwAADASEQMAAIxExAAAACMRMQAAwEhEDAAAMBIRAwAAjETEAAAAIxExAADASEQMAAAw\n",

"EhEDAACMRMQAAAAjETEAAMBIRAwAADASEQMAAIxExAAAACMRMQAAwEhEDAAAMBIRAwAAjETEAAAA\n",

"IxExAADASEQMAAAwEhEDAACMRMQAAAAjETEAAMBIRAwAADASEQMAAIxExAAAACMRMQAAwEhEDAAA\n",

"MJKtEbNs2TLFxcXJ4XCoqqqqy2PefPNNDR8+XCkpKf7t5MmT/vGSkhKNGzdO8fHxysnJUWtrq51T\n",

"BgAAhrA1YmbPnq0dO3YoNja2x+OSkpJUVVXl34YPHy5JOnTokO6//35VVFSourpax44d0/r16+2c\n",

"MgAAMIStEXPVVVfJ5XL1+v6lpaXKzMxUdHS0HA6HlixZok2bNnV7fEtLi5qamgK29vb2Xj8+AAAY\n",

"vAbFNTE1NTXyeDxKS0vT2rVr/ft9Pl/AqzhxcXHy+XzdnqewsFAREREBW2Vlpa1zBwAAA2PAI8bj\n",

"8ejIkSPas2ePtm7dqnXr1un555/v1bny8/PV2NgYsKWnp/fxjAEAwGAw4BETHh6uiIgISZLL5dLc\n",

"uXNVUVEhSXK73Tp8+LD/WK/XK7fb3e25nE6nwsPDA7aQkBB7nwAAABgQAx4xdXV16ujokCQ1Nzdr\n",

"27ZtSk1NlSTNmjVL5eXlqq+vl2VZWrdunebMmTOQ0wUAAIOErRGTl5cnl8ulI0eO6LrrrlNCQoIk\n",

"KTs7W+Xl5ZKkLVu2aNKkSUpOTtbkyZM1bdo0LVy4UJI0duxYrVq1SlOnTlVCQoJGjx6tvLw8O6cM\n",

"AAAMEWrnyYuKirrcX1xc7P966dKlWrp0abfnyMnJUU5OTp/PDQAAmG3A304CAADoDSIGAAAYiYgB\n",

"AABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgY\n",

"AABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGImI\n",

"AQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJGI\n",

"GAAAYCQiBgAAGImIAQAARrI1YpYtW6a4uDg5HA5VVVV1eczrr7+u9PR0jR8/XhMmTNCKFSvU0dEh\n",

"SfJ6vQoJCVFKSop/q6mpsXPKAADAELZGzOzZs7Vjxw7FxsZ2e8z555+vzZs3a9++fXr//ff1zjvv\n",

"6JlnnvGPh4WFqaqqyr/Fx8fbOWUAAGCIUDtPftVVV532mNTUVP/X55xzjlJSUuT1env1eC0tLWpp\n",

"aQnY197e3qtzAQCAwW1QXRNTX1+v0tJSTZ8+3b/vxIkTSktLk8fjUUFBQY9RUlhYqIiIiICtsrKy\n",

"P6YOAAD62aCJmKamJt14441asWKFrrjiCklSTEyMjh49ql27dmn79u2qqKjQ448/3u058vPz1djY\n",

"GLClp6f311MAAAD9aFBETHNzszIyMjRjxgwtX77cv9/pdCoqKkqSNGLECC1atEgVFRXdnsfpdCo8\n",

"PDxgCwkJsX3+AACg/w14xHz99dfKyMhQRkaG7rvvvoCxhoYGtba2Sjp1vUtZWVnANTQAAGDosjVi\n",

"8vLy5HK5dOTIEV133XVKSEiQJGVnZ6u8vFyStGbNGlVWVqqsrMz/a9SPPPKIJGnHjh1KTU1VcnKy\n",

"PB6PoqOjtXLlSjunDAAADGHrbycVFRV1ub+4uNj/9cqVK7sNk6ysLGVlZdkyNwAAYLYBfzsJAACg\n",

"N4gYAABgJCIGAAAYiYgBAABGCjpiXn31VTvmAQAAEJSgI6agoEBJSUlas2aNmpqa7JgTAADAaQUd\n",

"MW+//bY2b96sf//730pMTNQdd9yhffv22TE3AACAbvXqmpjU1FQ99dRTeuWVV7Rt2zZddtllmjZt\n",

"mj7++OO+nh8AAECXehUx27dv14wZM5SVlaU777xT9fX1ysvL00033dTX8wMAAOhS0H+x99JLL9Wo\n",

"UaO0bNkyZWVl+T9gcfbs2SopKenzCQIAAHQl6IjZuHGjLr/88i7HXn755R89IQAAgDMR9NtJ77//\n",

"vr744gv/7c8//1xPPfVUn04KAADgdIKOmLVr12rEiBH+2yNHjtTatWv7dFIAAACnE3TEWJbVaV97\n",

"e3ufTAYAAOBMBR0xMTExev755/23n3vuOcXExPTppAAAAE4n6At7n3zySc2YMUMrVqyQJJ177rl6\n",

"8cUX+3xiAAAAPQk6Yi655BLt27dP+/fvlyQlJSX5f80aAACgvwQdMZLkcDgUGRmptrY2HT16VJLk\n",

"drv7dGIAAAA9CTpi/va3v2nZsmUaNmyYzjrr1CU1DodDDQ0NfT45AACA7gQdMQ899JB27dqlpKQk\n",

"O+YDAABwRoL+7aRRo0YRMAAAYMAFHTEzZ87Uk08+qYaGBjU1Nfk3AACA/hT020krV66UJC1fvlwO\n",

"h0OWZcnhcPAH7wAAQL8KOmI6OjrsmAcAAEBQgn47STr1IZDPPvusJOmrr75SXV1dn04KAADgdHr1\n",

"AZCLFi3Sgw8+KOnUp1j/6le/6ut5AQAA9CjoiFm/fr3ee+89hYeHS5Li4+N1/PjxPp8YAABAT4KO\n",

"GKfTqeHDhwfsCw3t1R/+BQAA6LWgI2b06NH67LPP5HA4JJ36C7585AAAAOhvvfoU67lz5+rTTz/V\n",

"mDFjFB4erm3bttkxNwAAgG4FHTEJCQnauXOn9u/fL8uy+BRrAAAwIIKOGJ/PJ0k677zzJIlPsQYA\n",

"AAMi6Ii5/PLL/X+p99tvv9U333yjkSNH8inWAACgXwUdMf/969RlZWX68MMP+2xCAAAAZ6JXf7H3\n",

"h7KysvTSSy/1xVwAAADOWNAR88NPrv7yyy/1yiuvdPsp1suWLVNcXJwcDoeqqqq6PWdJSYnGjRun\n",

"+Ph45eTkqLW19YzGAADA0BV0xERGRur8889XZGSkoqKitHz5cv3pT3/q8tjZs2drx44dio2N7fZ8\n",

"hw4d0v3336+KigpVV1fr2LFjWr9+/WnHAADA0BZ0xHR0dKi9vV0dHR1qbW3Vvn37lJGR0eWxV111\n",

"lVwuV4/nKy0tVWZmpqKjo+VwOLRkyRJt2rTptGNdaWlpCXilqKmpSe3t7cE+RQAAYIAB/7wAn88X\n",

"8EpNXFyc/9e4exrrSmFhoVatWhWwb/LkyX084/8/l9/adx2Qd/X/2nZuABhM7Pq/lP9Hh4agX4k5\n",

"66yzFBIS0mn7fv9Ays/PV2NjY8CWnp4+oHMCAAD2CPqVmIKCAp08eVK33367JGndunUaPny47r77\n",

"7l5NwO12q6amxn/b6/X6/3BeT2NdcTqdcjqdAfsGOqwAAIA9gn4lZuvWrXrkkUfkcrnkcrn08MMP\n",

"q6ysTOedd57/r/gGY9asWSovL1d9fb0sy9K6des0Z86c044BAIChLeiIaW5uDvjrvA0NDWpubu7y\n",

"2Ly8PLlcLh05ckTXXXedEhISJEnZ2dkqLy+XJI0dO1arVq3S1KlTlZCQoNGjRysvL++0YwAAYGgL\n",

"+u2ke+65R8nJybrhhhskSa+88ooefPDBLo8tKirqcn9xcXHA7ZycHOXk5HR5bE9jAABg6Ao6YvLy\n",

"8jR16lS98cYbkqTly5drwoQJfT4xAACAnvTqV6xHjhypSZMm6ZprrlFbW5u+++47nX322X09NwAA\n",

"gG4FfU1MaWmpJk+erIULF0qS9u7dq5kzZ/b1vAAAAHoUdMQUFhZqz549ioyMlCQlJyfr8OHDfT0v\n",

"AACAHgUdMSEhIRo5cmTAPt5KAgAA/S3oiAkLC9OxY8fkcDgkSf/85z81YsSIPp8YAABAT4K+sPf3\n",

"v/+9rr/+eh08eFBXXnmlDh06pJdesu9zhAAAALoSVMR8/wnWb7zxht555x1ZlqUpU6b4r48BAADo\n",

"L0FFzFlnnaXc3Fx9+OGHuv766+2aEwAAwGkFfU3MuHHjVF1dbcdcAAAAzljQ18R88cUXSklJ0ZQp\n",

"U/Szn/3Mv7+srKxPJwYAANCTM46Y3NxcrV+/XvPnz1dmZqbOP/98O+cFAADQozOOmN27d0uS5s+f\n",

"L4/Hoz179tg2KQAAgNMJ+poYSbIsq6/nAQAAEJQzfiXm5MmT+vjjj2VZlr799lv/19+77LLLbJkg\n",

"AABAV4KKmMzMTP/tH37tcDh08ODBvp0ZAABAD844Yrxer43TAAAACE6vrokBAAAYaEQMAAAwEhED\n",

"AACMRMQAAAAjETEAAMBIRAwAADASEQMAAIxExAAAACMRMQAAwEhEDAAAMBIRAwAAjETEAAAAIxEx\n",

"AADASEQMAAAwEhEDAACMRMQAAAAjETEAAMBIRAwAADCSrRFz4MABTZkyRYmJiUpLS9PevXs7HbNh\n",

"wwalpKT4t1GjRikrK0uS5PV6FRISEjBeU1Nj55QBAIAhQu08eV5ennJzc7VgwQKVlpZqwYIF2rVr\n",

"V8AxCxcu1MKFC/23J06cqFtvvdV/OywsTFVVVXZOEwAAGMi2V2IaGhq0e/duzZs3T5I0a9Ys1dbW\n",

"qrq6utv77Ny5Uw0NDcrMzOzVY7a0tKipqSlga29v79W5AADA4GZbxNTW1iomJkahoade7HE4HHK7\n",

"3fL5fN3ep6SkRLfddpuGDRvm33fixAmlpaXJ4/GooKCgxygpLCxUREREwFZZWdl3TwoAAAwag+bC\n",

"3hMnTmjz5s1avHixf19MTIyOHj2qXbt2afv27aqoqNDjjz/e7Tny8/PV2NgYsKWnp/fH9AEAQD+z\n",

"LWLGjBmjuro6tbW1SZIsy5LP55Pb7e7y+BdeeEETJkzQ+PHj/fucTqeioqIkSSNGjNCiRYtUUVHR\n",

"7WM6nU6Fh4cHbCEhIX34rAAAwGBhW8RERUXJ4/Fo48aNkqQtW7bI5XIpISGhy+NLSkoCXoWRTl1X\n",

"09raKunU9S5lZWVKTU21a8oAAMAgtr6dVFRUpKKiIiUmJmr16tXasGGDJCk7O1vl5eX+4/bv36+q\n",

"qirdcsstAfffsWOHUlNTlZycLI/Ho+joaK1cudLOKQMAAEPY+ivWSUlJevfddzvtLy4u7nRcc3Nz\n",

"p+OysrL8fzMGAADghwbNhb0AAADBIGIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQi\n",

"BgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYi\n",

"YgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAk\n",

"IgYAABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJFsj5sCBA5oyZYoS\n",

"ExOVlpamvXv3djrmzTff1PDhw5WSkuLfTp486R8vKSnRuHHjFB8fr5ycHLW2tto5ZQAAYAhbIyYv\n",

"L0+5ubn67LPPdO+992rBggVdHpeUlKSqqir/Nnz4cEnSoUOHdP/996uiokLV1dU6duyY1q9fb+eU\n",

"AQCAIWyLmIaGBu3evVvz5s2TJM2aNUu1tbWqrq4+43OUlpYqMzNT0dHRcjgcWrJkiTZt2tTt8S0t\n",

"LWpqagrY2tvbf/RzAQAAg49tEVNbW6uYmBiFhoZKkhwOh9xut3w+X6dja2pq5PF4lJaWprVr1/r3\n",

"+3w+xcbG+m/HxcV1ef/vFRYWKiIiImCrrKzsw2cFAAAGiwG/sNfj8ejIkSPas2ePtm7dqnXr1un5\n",

"55/v1bny8/PV2NgYsKWnp/fxjAEAwGBgW8SMGTNGdXV1amtrkyRZliWfzye32x1wXHh4uCIiIiRJ\n",

"LpdLc+fOVUVFhSTJ7Xbr8OHD/mO9Xm+n+/+Q0+lUeHh4wBYSEtLXTw0AAAwCtkVMVFSUPB6PNm7c\n",

"KEnasmWLXC6XEhISAo6rq6tTR0eHJKm5uVnbtm1TamqqpFPX0ZSXl6u+vl6WZWndunWaM2eOXVMG\n",

"AAAGsfXtpKKiIhUVFSkxMVGrV6/Whg0bJEnZ2dkqLy+XdCpuJk2apOTkZE2ePFnTpk3TwoULJUlj\n",

"x47VqlWrNHXqVCUkJGj06NHKy8uzc8oAAMAQoXaePCkpSe+++26n/cXFxf6vly5dqqVLl3Z7jpyc\n",

"HOXk5NgyPwAAYK4Bv7AXAACgN4gYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEA\n",

"AEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgA\n",

"AGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgB\n",

"AABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGMnWiDlw4ICmTJmixMRE\n",

"paWlae/evZ2Oef3115Wenq7x48drwoQJWrFihTo6OiRJXq9XISEhSklJ8W81NTV2ThkAABjC1ojJ\n",

"y8tTbm6uPvvsM917771asGBBp2POP/98bd68Wfv27dP777+vd955R88884x/PCwsTFVVVf4tPj7e\n",

"zikDAABD2BYxDQ0N2r17t+bNmydJmjVrlmpra1VdXR1wXGpqqsaOHStJOuecc5SSkiKv19urx2xp\n",

"aVFTU1PA1t7e/qOeBwAAGJxsi5ja2lrFxMQoNDRUkuRwOOR2u+Xz+bq9T319vUpLSzV9+nT/vhMn\n",

"TigtLU0ej0cFBQU9RklhYaEiIiICtsrKyr57UgAAYNAYNBf2NjU16cYbb9SKFSt0xRVXSJJiYmJ0\n",

"9OhR7dq1S9u3b1dFRYUef/zxbs+Rn5+vxsbGgC09Pb2/ngIAAOhHtkXMmDFjVFdXp7a2NkmSZVny\n",

"+Xxyu92djm1ublZGRoZmzJih5cuX+/c7nU5FRUVJkkaMGKFFixapoqKi28d0Op0KDw8P2EJCQvr4\n",

"mQEAgMHAtoiJioqSx+PRxo0bJUlbtmyRy+VSQkJCwHFff/21MjIylJGRofvuuy9grKGhQa2trZJO\n",

"Xe9SVlam1NRUu6YMAAAMYuvbSUVFRSoqKlJiYqJWr16tDRs2SJKys7NVXl4uSVqzZo0qKytVVlbm\n",

"/zXqRx55RJK0Y8cOpaamKjk5WR6PR9HR0Vq5cqWdUwYAAIYItfPkSUlJevfddzvtLy4u9n+9cuXK\n",

"bsMkKytLWVlZts0PAACYa9Bc2AsAABAMIgYAABiJiAEAAEYiYgAAgJGIGAAAYCQiBgAAGImIAQAA\n",

"RiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEAAEYiYgAAgJGIGAAA\n",

"YCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGImIAAICRiBgAAGAkIgYAABiJiAEA\n",

"AEYiYgAAgJGIGAAAYCQiBgAAGImIAQAARiJiAACAkYgYAABgJCIGAAAYiYgBAABGsjViDhw4oClT\n",

"pigxMVFpaWnau3dvl8eVlJRo3Lhxio+PV05OjlpbW89oDAAADF22RkxeXp5yc3P12Wef6d5779WC\n",

"BQs6HXPo0CHdf//9qqioUHV1tY4dO6b169efdgwAAAxttkVMQ0ODdu/erXnz5kmSZs2apdraWlVX\n",

"VwccV1paqszMTEVHR8vhcGjJkiXatGnTace60tLSoqampoCtvb3drqcIAAAGUKhdJ66trVVMTIxC\n",

"Q089hMPhkNvtls/nU0JCgv84n8+n2NhY/+24uDj5fL7TjnWlsLBQq1atCth3ySWXaPny5X3ynL7X\n",

"3t6umMpKpaenKyQkpE/PLUnLl/+zz89pqvb2dlXatNZZfXq2QKZ9D+1cZzvZ9T206/tn6jrbyY7v\n",

"YXt7u/7nfx5mnX/AxHWOjY3VXXfd1eMxtkXMQMjPz+8ULE6nU06ns08fp6mpSREREXr11VcVHh7e\n",

"p+dGINa6f7DO/YN17h+sc/8YDOtsW8SMGTNGdXV1amtrU2hoqCzLks/nk9vtDjjO7XarpqbGf9vr\n",

"9fqP6WmsK3YECwAAGJxsuyYmKipKHo9HGzdulCRt2bJFLpcr4K0k6dS1MuXl5aqvr5dlWVq3bp3m\n",

"zJlz2jEAADC02frbSUVFRSoqKlJiYqJWr16tDRs2SJKys7NVXl4uSRo7dqxWrVqlqVOnKiEhQaNH\n",

"j1ZeXt5pxwAAwNBm6zUxSUlJevfddzvtLy4uDridk5OjnJycLs/R09hAcTqdeuCBB3jrqh+w1v2D\n",

"de4frHP/YJ37x2BYZ4dlWdaAPToAAEAv8bEDAADASEQMAAAwEhEDAACMRMQAAAAjETG9cKafzo3O\n",

"4uLilJSUpJSUFKWkpOi5556T1POa9nZsKFm2bJni4uLkcDhUVVXl32/Hug71Ne9urbv72ZZY62B9\n",

"++23mjlzphITE5WcnKxp06b5P3evoaFBGRkZGjdunCZOnKi33nrLfz87xn7qelrra665RhdffLH/\n",

"Z/qPf/yj/36DZq0tBO3aa6+1NmzYYFmWZb3wwgvWFVdcMbATMkhsbKz1wQcfdNrf05r2dmwo+de/\n",

"/mXV1tZ2Wl871nWor3l3a93dz7ZlsdbBOnnypPXSSy9ZHR0dlmVZ1p///Gfr6quvtizLshYuXGg9\n",

"8MADlmVZVmVlpXXRRRdZ3333nW1jP3U9rfXVV19tbd26tcv7DZa1JmKCdOzYMSssLMxqbW21LMuy\n",

"Ojo6rAsuuMA6cODAAM/MDF39R9/TmvZ2bKj64frasa6s+f8504hhrX+8Xbt2WbGxsZZlWdZ5551n\n",

"1dXV+cfS0tKs1157zbaxoeaHa91TxAyWtebtpCD19OncODO//vWvNWnSJC1evFjHjx/vcU17O4ae\n",

"f1ZZc3v898+2ZM/3YahZs2aNZsyYoc8//1ytra2Kjo72j8XFxcnn89kyNhR9v9bf++1vf6tJkybp\n",

"lltu0cGDByVpUK01EYN+9dZbb+mjjz7Snj17NGrUKM2fP3+gpwT0CX627fHoo4+qurpahYWFAz2V\n",

"n7z/Xutnn31Wn376qT766CP94he/0PTp0wd4hp0RMUH64adzS+r207nRte/XadiwYbr77rtVUVHR\n",

"45r2dgw9/6yy5n2vq59tyZ7vw1Dx2GOPqaysTC+//LLOPfdcjRw5UqGhoaqvr/cf4/V65Xa7bRkb\n",

"Sv57raVTP7vSqVcBly5dqoMHD+rzzz8fVGtNxATpTD+dG52dOHFCX331lf/2pk2blJqa2uOa9nYM\n",

"Pf+ssuZ9q7ufbcme78NQ8MQTT2jTpk167bXXFBkZ6d9/8803a926dZKkXbt26ejRo7r66qttGxsK\n",

"ulrrtrY2HTt2zH/Mli1bdMEFF2jkyJGSBtFa9/pqmiHs008/tSZPnmyNGzfOuvzyy62PPvpooKdk\n",

"hJqaGislJcWaNGmSNXHiRCszM9M6dOiQZVk9r2lvx4aS3Nxc66KLLrJCQkKsqKgoKz4+3rIse9Z1\n",

"qK95V2vd08+2ZbHWwaqtrbUkWWPHjrWSk5Ot5ORkKz093bIsy6qvr7emTZtmJSQkWOPHj7def/11\n",

"//3sGPup626tv/76a+vyyy+3Jk6caF122WXWL3/5S6uqqsp/v8Gy1nwAJAAAMBJvJwEAACMRMQAA\n",

"wEhEDAAAMBIRAwAAjETEAAAAIxExAADASEQMAAAwEhEDAACMRMQAAAAjETEAAMBI/w8+gGs9JCe0\n",

"tgAAAABJRU5ErkJggg==\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-b2fce110-cec4-4742-b4f8-ce3498258909\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-b2fce110-cec4-4742-b4f8-ce3498258909\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_23['Height(Inches)'].plot(kind='hist', bins=20, title='Height(Inches)')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-c263f504-0e14-45dc-b48e-c90e8e030c31\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAfBUlEQVR4nO3df3BV9Zn48ecSaBSBAMEWKiUUBdQaAWNTVqWiXVp1XUCr2y3r\n",

"gq5dLKvjMrpTxTpT7VrSdqytOutCGVbbal1oBTujq61W/NG6KyggagtIAQX5WZSgAhHC+f7h19RI\n",

"QC7mfEKS12vmzphzzj3nycc7ztt7b+4tZFmWBQBAQh1aegAAoP0RIABAcgIEAEhOgAAAyQkQACA5\n",

"AQIAJCdAAIDkBAgAkJwAAQCSEyDQTk2dOjW++MUvHvDxjz/+eBQKhdi9e3fR19q1a1dUVlbG/Pnz\n",

"i77vgbjrrruib9++uZw7IuJv//Zv46677srt/NAeCRBohUaOHBnXX3/9XtsvvvjiuOiiiw7oHNdd\n",

"d1385je/STLXf/7nf8bRRx8d1dXVERGxevXqKBQKsWLFima9fl5uuummuOaaa2LHjh0tPQq0GQIE\n",

"yNWePXvihz/8YUycOLGlRzloQ4YMiYqKirj77rtbehRoMwQItFE7d+6M6667Lo4++ujo0aNHfP7z\n",

"n49FixY17L/hhhvitNNOa/h548aNMXbs2OjevXsMGDAg7rnnnigUCvH44483Ou/9998fgwYNiq5d\n",

"u8aoUaPitddei4iIr3/96/HUU0/F97///ejSpUt06dIlIiIWLlwY69atizPOOGOfs7738s4vf/nL\n",

"Js8dEbFjx464/vrrG/YPGDAgfvKTnzQ6z/Tp06N///5RVlYWF154YWzbtq1h39atW2PSpElRUVER\n",

"5eXlcc4558TKlSsb9s+ePTs+85nPRLdu3aJXr17x13/9143OfdZZZ8WcOXM+bNmBAyRAoI36+te/\n",

"HvPnz48nnngiNm/eHH/3d38XX/rSl2Lr1q1NHj9u3Lior6+PVatWxXPPPRezZ89u8ri5c+fGggUL\n",

"Yu3atbF9+/a47rrrIiJi2rRpMWLEiPjGN74Rb731Vrz11lsREfHss8/GgAED4vDDD//Qmfd17oiI\n",

"f/7nf47f/OY38atf/Sq2bdsWv/vd76KysrJh/4YNG2Lp0qXxxz/+MZYuXRqLFy+OH/zgBxERkWVZ\n",

"nHfeebFt27ZYtGhRrFu3LiorK+Pcc8+NXbt2xfbt2+Oiiy6K22+/PbZt2xZr165tdO2IiBNPPDEW\n",

"LFjwob8DcGAECLRSN998c3Tv3r3R7ec//3lERGzZsiV+8pOfxH/8x39E3759o2PHjnHFFVdEWVlZ\n",

"PPDAA3uda+3atfHYY4/F9773vejRo0f06NEjvvOd7zR53ZqamigrK4uysrIYN27ch76x9PXXX4+y\n",

"srID+p32de4///nPcc8998Qdd9wRxx13XBQKhfjkJz8ZJ510UsN9O3bsGN///vfj8MMPjz59+sTY\n",

"sWMb7r9o0aL4/e9/H9OnT4+ePXtGaWlpTJ06NVatWhXPPPNMRER06tQp/vjHP8af//znOOyww+LM\n",

"M89sNFtZWVm88cYbB/R7AB9OgEAr9W//9m+xdevWRrdx48ZFRDS8ufNzn/tco0B57bXXYu3atXud\n",

"672XOioqKhq29e/fv8nrfvKTn2z45yOOOCLefPPN/c7Zs2fPqK2tPaDfaV/nXrVqVUREDB48eJ/3\n",

"7dWrV3Tq1KnJ+7/88suxe/fu6Nu3b8NalJeXR0TEmjVronPnzvHwww/Ho48+GoMHD47Kysq49dZb\n",

"G52/trY2evTocUC/B/DhOrb0AEDz6927d0RELFmyJPr16/ehxx911FEREfHKK6/E8ccf3/DPxerQ\n",

"Ye//p6mqqoqVK1fGzp0747DDDiv6nBF/iaHly5dHVVVV0ffv3bt3fOxjH4vNmzc3ipT3GzFiRIwY\n",

"MSKyLIsnnngizjrrrDj++ONj1KhRERHxwgsvxMknn3xQ8wN78wwItEEVFRUxduzYuPzyyxtC4s03\n",

"34yHHnoo1q9fv9fxffv2jZEjR8aUKVMank1p6s9pP0zv3r1j+fLljbZVVVVFnz59Yt68eQf3y0TE\n",

"kUceGV/96lfj8ssvj2XLlkVExPr162PhwoUHdP/TTjstTjjhhJg0aVJs2rQpIiLeeOONuO+++2L7\n",

"9u2xYcOG+MUvfhFbt26NQqEQ3bt3j0KhEB07/uX/0R5++OE477zzDvp3ABoTINBG/fznP4+qqqoY\n",

"NWpUdO3aNQYPHhwzZsyILMv2eXyWZVFRURHDhg2L0aNHR0QU9azF1VdfHcuWLYsePXpE9+7dI+Ld\n",

"Z0UmT54c06dP/0i/z4wZM+L000+Ps88+O7p06RKnnnpqvPTSSwd035KSknjkkUeic+fO8bnPfS66\n",

"du0aQ4YMiblz50ahUIgsy2LatGkxYMCA6NKlS1xwwQXxne98p+Evd5YsWRKrVq2Kf/zHf/xIvwPw\n",

"F4VsX/81Atq1xYsXx7Bhw2LdunXRp0+fj3SuXbt2xbBhw+K//uu/Gj6MrDUZPXp0nHfeeXHJJZe0\n",

"9CjQZggQICIiXnzxxXjnnXdi6NChsW7duhg/fnxERDz22GMtPBnQFnkJBoiId//K4+///u+ja9eu\n",

"UVVVFb169Yp77rmnpccC2ijPgAAAyXkGBABIToAAAMkJEAAgOQECACR3yAbIB7+HAQBoOw7ZADmY\n",

"76EAAFqHQzZAAIC2S4AAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAA\n",

"IDkBAgAk1zGvE2/ZsiW+8IUvNPy8ffv2WLlyZWzatCl69uyZ12UBgFYgtwApLy+PxYsXN/x88803\n",

"xxNPPCE+AID8AuSDZs6cGTU1NU3uq6uri7q6ukbb6uvrU4wFALSAJAHy9NNPxxtvvBHnnntuk/tr\n",

"amrixhtvbLRt+PDhuc3T/9oHcznv6u/+TS7nBYC2JsmbUGfOnBnjx4+Pjh2b7p0pU6ZEbW1to1t1\n",

"dXWK0QCAFpD7MyBvvfVWzJ49OxYsWLDPY0pLS6O0tLTRtpKSkrxHAwBaSO7PgMyaNSuGDBkSxx57\n",

"bN6XAgBaidwDZObMmXHppZfmfRkAoBXJ/SWYp59+Ou9LAACtjE9CBQCSEyAAQHICBABIToAAAMkJ\n",

"EAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAAIDkBAgAkJ0AAgOQECACQnAAB\n",

"AJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABIToAAAMkJEAAg\n",

"OQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAAIDkBAgAkJ0AAgOQECACQnAABAJLL\n",

"NUDq6uriiiuuiIEDB0ZlZWVcdNFFeV4OAGglOuZ58muvvTYKhUIsX748CoVCbNiwIc/LAQCtRG4B\n",

"8vbbb8fMmTNj7dq1USgUIiKid+/eeV0OAGhFcnsJ5k9/+lP07Nkzpk6dGieffHKMGDEifvvb3zZ5\n",

"bF1dXWzbtq3Rrb6+Pq/RAIAWlluA7N69O1555ZU4/vjj49lnn43bbrstvvKVr8TGjRv3OrampibK\n",

"ysoa3ebPn5/XaABAC8stQPr16xcdOnSIf/iHf4iIiGHDhsWnP/3peOGFF/Y6dsqUKVFbW9voVl1d\n",

"nddoAEALyy1AevXqFV/4whfi17/+dURErFq1KlatWhXHHXfcXseWlpZGt27dGt1KSkryGg0AaGG5\n",

"/hXMtGnT4tJLL41rrrkmOnToENOnT4+jjjoqz0sCAK1ArgEyYMCAmDdvXp6XAABaIZ+ECgAkJ0AA\n",

"gOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABI\n",

"ToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAAIDkBAgAkJ0AAgOQE\n",

"CACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABIToAA\n",

"AMkJEAAgOQECACQnQACA5HINkP79+8fgwYNj6NChMXTo0Jg1a1aelwMAWomOeV9g1qxZMXTo0Lwv\n",

"AwC0IrkHyIGoq6uLurq6Rtvq6+tbaBoAIG+5vwdk/PjxUVlZGZdeemls3ry5yWNqamqirKys0W3+\n",

"/Pl5jwYAtJBcA+TJJ5+MJUuWxMKFC6NXr14xYcKEJo+bMmVK1NbWNrpVV1fnORoA0IJyfQmmX79+\n",

"ERHRqVOnmDx5cgwaNKjJ40pLS6O0tLTRtpKSkjxHAwBaUG7PgLz99tuxdevWhp/vvffeGDZsWF6X\n",

"AwBakdyeAdm4cWN8+ctfjvr6+siyLAYMGBA//elP87ocANCK5BYgAwYMiEWLFuV1egCgFfNJqABA\n",

"cgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABIToAAAMkJEAAgOQECACQn\n",

"QACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAAIDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIE\n",

"AEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABIToAAAMkVHSC//vWv85gDAGhH\n",

"ig6Qb3/72zF48OC49dZbY9u2bXnMBAC0cUUHyO9///v47//+73jxxRdj0KBB8S//8i/xhz/8IY/Z\n",

"AIA26qDeAzJs2LCYMWNGPPzww/HAAw/EiSeeGKNGjYoXXnihuecDANqggwqQRx99NMaMGRPnn39+\n",

"XH755bFhw4a47LLL4rzzzmvu+QCANqhjsXc47rjjolevXnHllVfG+eefHyUlJRERccEFF8TMmTOb\n",

"fUAAoO0p+hmQu+++O5566qm48MILG+LjPQ899FCT97nzzjujUCjE/ffff1BDAgBtS9EB8txzz8Xr\n",

"r7/e8POWLVtixowZ+zx+9erVMWPGjBg+fPjBTQgAtDlFB8gdd9wRPXv2bPi5vLw87rjjjiaP3bNn\n",

"T3zta1+L22+/PUpLS/d5zrq6uti2bVujW319fbGjAQCtRNEBkmXZXtv2FQu33HJLnHrqqVFVVbXf\n",

"c9bU1ERZWVmj2/z584sdDQBoJYoOkD59+sTs2bMbfp41a1b06dNnr+NefPHFuO++++L666//0HNO\n",

"mTIlamtrG92qq6uLHQ0AaCWK/iuYH/3oRzFmzJj4xje+ERERnTt3jl/96ld7HffUU0/F6tWrY+DA\n",

"gRERsWHDhpg4cWKsX78+Jk2a1OjY0tLSvV6i+eAbXAGAtqPoADn22GPjD3/4QyxbtiwiIgYPHtxk\n",

"LEyaNKlRaIwcOTImT54cY8eOPfhpAYA2oegAiYgoFArRvXv32L17d7z22msREdGvX79mHQwAaLuK\n",

"DpC77rorrrzyyujUqVN06PDuW0gKhUJs2rRpv/d7/PHHD2pAAKDtKTpA/v3f/z0WLFgQgwcPzmMe\n",

"AKAdKPqvYHr16iU+AICPpOgAGTt2bPzoRz+KTZs2NfrgMACAA1X0SzDf/OY3IyLiqquuikKhEFmW\n",

"RaFQ8MmlAMABKzpA9uzZk8ccAEA7UvRLMBHvfiHdz372s4iI2Lp1a6xfv75ZhwIA2raD+jK6f/qn\n",

"f4obbrghIt79Ntxx48Y191wAQBtWdID8+Mc/jv/7v/+Lbt26RUTE0UcfHZs3b272wQCAtqvoACkt\n",

"LY3DDz+80baOHQ/qA1UBgHaq6AA58sgjY/ny5VEoFCLi3U9G9THsAEAxDurbcL/61a/G0qVL41Of\n",

"+lR069YtHnjggTxmAwDaqKID5Jhjjolnnnkmli1bFlmW7fPbcAEA9qXoAHn11VcjIuKII46IiPBt\n",

"uABA0YoOkKqqqoZPQN25c2ds3749ysvLP/TbcAEA3lN0gHzwT27nzJkTzz//fLMNBAC0fQf1Sajv\n",

"d/7558eDDz7YHLMAAO1E0c+AvP+bb+vr6+OZZ57xbbgAQFGKDpDu3bs3vAekpKQkBg4cGLfddlse\n",

"swEAbZRvwwUAkvvI7wEBAChW0c+AdOjQoeFj2N8vy7IoFApRX1/fLIMBAG1X0QHy7W9/O3bs2BGT\n",

"Jk2KiIhp06bF4YcfHpMnT27u2QCANqroAJk7d24899xzDT/fdNNNUVVVFd/85jebdTAAoO0q+j0g\n",

"b775ZqNPPd20aVO8+eabzToUANC2Ff0MyNVXXx1DhgyJc845JyIiHn744bjhhhuaey4AoA0rOkAu\n",

"u+yyOPXUU2PevHkREXHVVVfFZz7zmWYfDABou4oOkIiI8vLyqKysjJEjR8bu3bvjnXfeiY997GPN\n",

"PRsA0EYV/R6QX/7ylzF8+PC45JJLIiLipZdeirFjxzb3XABAG1Z0gNTU1MTChQuje/fuERExZMiQ\n",

"eOWVV5p7LgCgDSs6QEpKSqK8vLzRNi+/AADFKDpAunbtGhs3bmz4NNTf/va30bNnz2YfDABou4p+\n",

"E+r3vve9OPvss2PlypVx2mmnxapVq+LBBx/MYzYAoI0qKkD27NkT9fX1MW/evHj66acjy7I45ZRT\n",

"Gt4PAgBwIIoKkA4dOsTEiRPj+eefj7PPPjuvmQCANq7o94AMHDgwVqxYkccsAEA7UfR7QF5//fUY\n",

"OnRonHLKKdGlS5eG7XPmzGnWwQCAtuuAA2TixInx4x//OCZMmBCjR4+OHj165DkXANCGHXCAPPvs\n",

"sxERMWHChDjppJNi4cKFuQ0FALRtRb8HJCIiy7LmngMAaEcO+BmQHTt2xAsvvBBZlsXOnTsb/vk9\n",

"J554Yi4DAgBtT1EBMnr06Iaf3//PhUIhVq5c2byTAQBt1gEHyOrVq4s++Re/+MXYsGFDdOjQIbp2\n",

"7Rq33XZbDBs2rOjzAABtS9F/hluM2bNnN3xK6ty5c+Piiy+O559/Ps9LAgCtQK4B8v6PaK+trW34\n",

"ArsPqquri7q6ukbb6uvr8xwNAGhBuQZIRMT48eNj3rx5ERHxP//zP00eU1NTEzfeeGOjbcOHD897\n",

"NACghRzUn+EW46c//WmsWbMmbrrpprjmmmuaPGbKlClRW1vb6FZdXZ33aABAC8k9QN4zYcKEmDdv\n",

"XmzZsmWvfaWlpdGtW7dGt5KSklSjAQCJ5RYgW7dujXXr1jX8fP/990d5eXn07Nkzr0sCAK1Ebu8B\n",

"qa2tjQsvvDB27NgRHTp0iCOPPDIeeOCBfb4RFQBoP3ILkIqKipg/f35epwcAWrFk7wEBAHiPAAEA\n",

"khMgAEByAgQASE6AAADJCRAAIDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5\n",

"AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABIToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMg\n",

"AEByAgQASE6AAADJCRAAIDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIA\n",

"JCdAAIDkBAgAkFxuAbJz584YO3ZsDBo0KIYMGRKjRo2KFStW5HU5AKAVyfUZkIkTJ8ayZcvi+eef\n",

"jzFjxsTXvva1PC8HALQSuQXIYYcdFuecc04UCoWIiBg+fHisXr06r8sBAK1Ix1QXuvXWW2PMmDFN\n",

"7qurq4u6urpG2+rr61OMBQC0gCRvQp06dWqsWLEiampqmtxfU1MTZWVljW7z589PMRoA0AJyD5Cb\n",

"b7455syZEw899FB07ty5yWOmTJkStbW1jW7V1dV5jwYAtJBcX4K55ZZb4t57741HH300unfvvs/j\n",

"SktLo7S0tNG2kpKSPEcDAFpQbgGydu3auPrqq2PAgAFxxhlnRMS7ofHMM8/kdUkAoJXILUD69u0b\n",

"WZbldXoAoBXzSagAQHICBABIToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6A\n",

"AADJCRAAIDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgA\n",

"kJwAAQCSEyAAQHICBABIToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJ\n",

"CRAAIDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIEAEgu1wC58soro3///lEoFGLx4sV5XgoAaEVy\n",

"DZALLrggfve730VFRUWelwEAWpmOeZ7885///AEdV1dXF3V1dY221dfX5zESAHAIyDVADlRNTU3c\n",

"eOONjbYNHz68haYBgEND/2sfzO3cq7/7N7md+0AcEm9CnTJlStTW1ja6VVdXt/RYAEBODolnQEpL\n",

"S6O0tLTRtpKSkhaaBgDI2yHxDAgA0L7kGiCXXXZZ9O3bN9auXRtf+tKX4phjjsnzcgBAK5HrSzDT\n",

"p0/P8/QAQCvlJRgAIDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdA\n",

"AIDkBAgAkJwAAQCSEyAAQHICBABIToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQA\n",

"SE6AAADJCRAAIDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDk\n",

"BAgAkJwAAQCSEyAAQHICBABIToAAAMkJEAAguVwD5OWXX45TTjklBg0aFJ/97GfjpZdeyvNyAEAr\n",

"kWuAXHbZZTFx4sRYvnx5XHPNNXHxxRfneTkAoJXILUA2bdoUzz77bFx00UUREfHlL3851qxZEytW\n",

"rNjr2Lq6uti2bVujW319fV6jAQAtrGNeJ16zZk306dMnOnZ89xKFQiH69esXr776ahxzzDGNjq2p\n",

"qYkbb7yx0bZjjz02rrrqqmafq76+PvrMnx/V1dVRUlLSrOe+6qrfNuv5WrP6+vqYn9M68xfWOQ3r\n",

"nI61buz8nM5bX18ff/VXN+WyzhUVFfGv//qvH3pcIcuyrFmv/P8999xzMW7cuFi2bFnDturq6vju\n",

"d78bZ555ZqNj6+rqoq6urtG20tLSKC0tbfa5tm3bFmVlZVFbWxvdunVr9vPzLuuchnVOwzqnY63T\n",

"OBTWObdnQD71qU/F+vXrY/fu3dGxY8fIsixeffXV6Nev317H5hUbAMChKbf3gHz84x+Pk046Ke6+\n",

"++6IiLjvvvuib9++e738AgC0P7k9AxIRMX369Lj44otj6tSp0a1bt7jzzjvzvBwA0ErkGiCDBw+O\n",

"//3f/83zEkUrLS2Nb33rW17yyZl1TsM6p2Gd07HWaRwK65zbm1ABAPbFR7EDAMkJEAAgOQECACQn\n",

"QACA5NpVgPh23o+mf//+MXjw4Bg6dGgMHTo0Zs2aFRH7X9eD3deeXHnlldG/f/8oFAqxePHihu15\n",

"rGt7XvN9rfO+HtcR1vlg7Ny5M8aOHRuDBg2KIUOGxKhRoxq+A2zTpk1x1llnxcCBA+OEE06IJ598\n",

"suF+eexry/a3ziNHjoxPf/rTDY/pH/7whw33O6TWOWtHzjjjjOzOO+/MsizLfvGLX2Qnn3xyyw7U\n",

"ylRUVGSLFi3aa/v+1vVg97UnTzzxRLZmzZq91jePdW3Pa76vdd7X4zrLrPPB2LFjR/bggw9me/bs\n",

"ybIsy26//fbs9NNPz7Isyy655JLsW9/6VpZlWTZ//vzsqKOOyt55553c9rVl+1vn008/PZs7d26T\n",

"9zuU1rndBMjGjRuzrl27Zrt27cqyLMv27NmTfeITn8hefvnlFp6s9WjqP9T7W9eD3ddevX9981hX\n",

"a/6uAw0Q69w8FixYkFVUVGRZlmVHHHFEtn79+oZ9n/3sZ7NHHnkkt33tyfvXeX8Bciitc7t5CWZ/\n",

"387LgRs/fnxUVlbGpZdeGps3b97vuh7sPvb/eLXmze+Dj+uIfP4dtEe33nprjBkzJrZs2RK7du2K\n",

"3r17N+zr379/vPrqq7nsa2/eW+f3XHvttVFZWRlf+cpXYuXKlRERh9w6t5sA4aN78sknY8mSJbFw\n",

"4cLo1atXTJgwoaVHgo/M4zo/U6dOjRUrVkRNTU1Lj9KmfXCdf/azn8XSpUtjyZIlMWLEiDj33HNb\n",

"eMKmtZsAef+380bEfr+dl6a9t1adOnWKyZMnx1NPPbXfdT3Yfez/8WrNm1dTj+uIfP4dtCc333xz\n",

"zJkzJx566KHo3LlzlJeXR8eOHWPDhg0Nx6xevTr69euXy7724oPrHPHuYzfi3Wffrrjiili5cmVs\n",

"2bLlkFvndhMgvp33o3n77bdj69atDT/fe++9MWzYsP2u68HuY/+PV2vefPb1uI7I599Be3HLLbfE\n",

"vffeG4888kh07969YfuFF14Y06ZNi4iIBQsWxGuvvRann356bvvauqbWeffu3bFx48aGY+677774\n",

"xCc+EeXl5RFxiK3zR3oHSSuzdOnSbPjw4dnAgQOzqqqqbMmSJS09Uqvxpz/9KRs6dGhWWVmZnXDC\n",

"Cdno0aOzVatWZVm2/3U92H3tycSJE7OjjjoqKykpyT7+8Y9nRx99dJZl+axre17zptZ5f4/rLLPO\n",

"B2PNmjVZRGQDBgzIhgwZkg0ZMiSrrq7OsizLNmzYkI0aNSo75phjsuOPPz577LHHGu6Xx762bF/r\n",

"/NZbb2VVVVXZCSeckJ144onZmWeemS1evLjhfofSOvsyOgAguXbzEgwAcOgQIABAcgIEAEhOgAAA\n",

"yQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHL/D4nEwkaksZCYAAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-c263f504-0e14-45dc-b48e-c90e8e030c31\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-c263f504-0e14-45dc-b48e-c90e8e030c31\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_24['Weight(Pounds)'].plot(kind='hist', bins=20, title='Weight(Pounds)')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-2f8b1436-f185-457a-8656-2db6cdfb19f4\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAgv0lEQVR4nO3dfVSUdf7/8dcANpkKCJi6IqAJWqlgGMva17zF0q1kNbddLbXV\n",

"1XRd12N7UrY6pWtSnTLNk5t5TLp1tdRaM2+oMNtuxJu8q5VCRdAAXQ0Q0zHH6/eHv2adQGOI64Mz\n",

"PB/nzDnLdV1zXe8+cdrnmbmYcViWZQkAAMCgoPoeAAAANDwECAAAMI4AAQAAxhEgAADAOAIEAAAY\n",

"R4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECNBANW3aVBs3bqzx8b1799ZDDz1Uq2u9/vrr+vWvf12r\n",

"55qSn58vh8OhgoKCnzz26aef1ujRo22fCQhkBAjgB+bPn69WrVrpwm9O+OCDD+RwODRz5kyvY4cM\n",

"GaIRI0b85DkrKyvVu3fvOptx48aNcjgcOnv2rNf206dP669//asee+wxz7bRo0erUaNGatq0qZo1\n",

"a6b4+Hg9/vjjdTaL3SZNmqQNGzZo69at9T0K4LcIEMAPpKWlqbS0VLt37/Zsy87OVufOnfXee+95\n",

"trndbuXk5GjAgAH1MWa1li5dqujoaCUlJXltv+uuu1RZWamKigotWLBAM2bMUFZWVr3M6Cun06m7\n",

"775bzzzzTH2PAvgtAgTwA506dVJMTIyys7M927Kzs/Xoo49q27ZtqqyslCRt2bJFZWVl6t+/vzZv\n",

"3qzevXsrMjJSsbGxevjhh71enXA4HF7xsmTJEnXo0EHNmjXTkCFDNGnSpCqvkJw4cULDhw9XWFiY\n",

"2rZtq3/84x+SpMLCQg0cOFCSFB4erqZNm2r27NmSpBUrVuiWW2656D+bw+FQWlqarr/+em3btk2S\n",

"9Omnn6pnz55q3ry52rVrp+nTp8vlcl109oKCAjkcDuXn50uSsrKyFB0drYULFyouLk5hYWEaNmyY\n",

"KioqPM/Zt2+f+vXrp9DQUF177bXKycnxmmvnzp3q1auXwsPD1bx5cyUnJysvL8+z/9Zbb9Xq1aur\n",

"vOIDoGYIEMBPpKWleQLk2LFj+vLLLzVo0CB169bNcy9Hdna2rrvuOlVWVqpfv3667777VFpaqk2b\n",

"Nulf//qXnnjiiWrPvWnTJt13332aP3++ysrKNHbsWL344otVjsvKytLYsWP17bffau7cuZo0aZLy\n",

"8/MVExOjtWvXSpLKyspUWVmpv/3tb5KkrVu3qnPnzhf95zp37pw2bNigPXv2KCUlRYWFherfv7+G\n",

"Dh2q0tJSbdiwQatXr9a0adN8Wq+SkhLt3btX//nPf7R3717t2LFDTz/9tKTzrxTdfvvtiomJUXFx\n",

"sbKzs7Vo0SKv50+cOFH9+vXTf//7Xx09elSLFy9WeHi4Z3/Xrl114sQJ7d2716e5AJxHgAB+YsCA\n",

"Adq0aZNcLpfef/99paamqnHjxurfv78nTLKzszVgwAA999xzuv322/W73/1OISEhio2N1QMPPKAl\n",

"S5ZUe+6XX35ZgwcP1sCBAxUcHKxBgwZp0KBBVY4bOnSo+vbtq6CgIA0dOlQRERGeVy0u5vjx4woL\n",

"C6uyffny5QoPD1eLFi00depUPfbYY7rnnnv02muvKSEhQVOmTNEVV1yh+Ph4zZo1Sy+88ILXPTA/\n",

"JSQkRE8++aQaN26s1q1bKz09Xbm5uZKkzz77THl5eZo7d66aNGmi6OhoPfzww17Pv+KKK1RYWKiD\n",

"Bw8qJCRESUlJatmypWf/D/9Mx48fr/FMAP6HAAH8RL9+/eRyufTxxx8rOztb/fv392zPzs5WZWWl\n",

"PvvsM6Wlpenrr7/WqlWrFB4e7nlMmDBBJSUl1Z778OHDio2N9doWFxdX5bhf/OIXXj83adJEJ06c\n",

"uOTcERERKi8vr7L9t7/9rcrKynTs2DHt2bNH999/vySpqKhI11xzjdexHTp00KlTp3T06NFLXutC\n",

"UVFRatSoUbWzHjp0SM2bN/cKo3bt2nk9PysrSw6HQ3379lV0dLSmTJnieatLkuefKSIiosYzAfgf\n",

"AgTwE5GRkbrhhhuUnZ3tFSCpqakqKirSq6++KofDoV69eqlVq1YaPny4ysrKPI+Kigqv/wO9UJs2\n",

"bXTw4EGvbT/++acEBVX/n5Pk5GR98cUXNT5P27ZttX//fq9t+/btU+PGjdWiRQtJ5/+E+OTJk579\n",

"33zzjU+zRkdH69tvv/UKox//+W1sbKwWLVqkgwcPauPGjcrOzlZmZqZn/+7du9W0aVN16tTJp2sD\n",

"OI8AAfzIgAED9NJLL6m8vFzdu3eXJDVq1Eg9e/bUzJkz1aNHDzVp0kQTJ07Um2++qTfeeENnzpyR\n",

"2+1Wfn6+1q1bV+1577nnHr399ttav3693G631q1bp3fffden2Vq1aiVJXjdqSuf/LHj9+vU1Ps/w\n",

"4cOVl5en+fPn68yZM9q3b58efvhhjR07Vg6HQ5LUvXt3ZWVl6fTp0yotLdWMGTN8mvWXv/yl4uPj\n",

"NXXqVJ08eVKHDx/WrFmzvI7JysrSoUOHZFmWQkNDFRISopCQEM/+devW6bbbbvPaBqDmCBDAjwwY\n",

"MEDFxcXq06eP1ysO/fv3V3FxsdLS0iRJN954o+fGyjZt2igyMlJ33nnnRV/V6NWrlxYsWKCJEycq\n",

"PDxcCxcu1IgRI3TllVfWeLaEhAT9+c9/Vp8+fRQeHu75XI8RI0aosLBQO3bsqNF5YmNjtWHDBi1b\n",

"tkxXX321+vbtq4EDB+rJJ5/0HPPcc8+ppKREUVFRSktL0z333FPjOaXz94esXr1aBw4cUOvWrdW/\n",

"f3+NGTPG65icnBylpKSoadOmSkxM1K9+9SvPjbBnzpzRK6+8oqlTp/p0XQD/47B8uasLQIORnp6u\n",

"li1bauHChT/7XK+99ppef/11rVmzpg4mq39z5szRzp079dJLL9X3KIDfIkAASDr/eR1paWlq3Lix\n",

"Vq5cqREjRuiDDz7QzTffXN+jAQhAvHkJQJK0evVq/fGPf9SZM2cUGxurF198kfgAYBteAQEAAMZx\n",

"EyoAADCOAAEAAMYRIAAAwDgCBAAAGHfZBsi8efPqewQAAGCTyzZAfP0eCgAA4D8u2wABAACBiwAB\n",

"AADGESAAAMA4AgQAABhHgAAAAOMIEAAAYBwBAgAAjCNAAACAcQQIAAAwjgABAADGESAAAMA4AgQA\n",

"ABgXYteJjx07pn79+nl+/u6777R//34dOXJEERERdl0WAAD4AdsCJDIyUjt27PD8/NRTT+nDDz8k\n",

"PgAAgH0B8mOLFy9WZmZmtftcLpdcLpfXNrfbbWIsAABQD4wEyCeffKJvv/1Wt912W7X7MzMzNWPG\n",

"DK9tqampts0TN32NLectePzXtpwXAIBAY+Qm1MWLF2vkyJEKCam+dzIyMlReXu71SElJMTEaAACo\n",

"B7a/AlJZWanly5dry5YtFz3G6XTK6XR6bQsODrZ7NAAAUE9sfwVk2bJlSkxMVKdOney+FAAA8BO2\n",

"B8jixYs1ZswYuy8DAAD8iO1vwXzyySd2XwIAAPgZPgkVAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAA\n",

"gHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAA\n",

"xhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAY\n",

"R4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAc\n",

"AQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYZ2uAuFwuTZo0SfHx8erSpYvuvvtuOy8H\n",

"AAD8RIidJ58+fbocDoe++uorORwOlZSU2Hk5AADgJ2wLkJMnT2rx4sU6dOiQHA6HJKlVq1Z2XQ4A\n",

"APgR296C2bdvnyIiIjR79mx1795dPXv21Pvvv1/tsS6XSxUVFV4Pt9tt12gAAKCe2RYgZ8+e1cGD\n",

"B3Xddddp69atevbZZ3XXXXeptLS0yrGZmZkKCwvzeuTm5to1GgAAqGe2BUhMTIyCgoI0YsQISVK3\n",

"bt3Url077d69u8qxGRkZKi8v93qkpKTYNRoAAKhntgVIVFSU+vXrp/Xr10uSDhw4oAMHDujaa6+t\n",

"cqzT6VRoaKjXIzg42K7RAABAPbP1r2Cef/55jRkzRtOmTVNQUJAWLlyoNm3a2HlJAADgB2wNkPbt\n",

"2ysnJ8fOSwAAAD/EJ6ECAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAY\n",

"R4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAc\n",

"AQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEE\n",

"CAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEg\n",

"AADAOAIEAAAYR4AAAADjCBAAAGCcrQESFxenjh07KikpSUlJSVq2bJmdlwMAAH4ixO4LLFu2TElJ\n",

"SXZfBgAA+BHbA6QmXC6XXC6X1za3211P0wAAALvZfg/IyJEj1aVLF40ZM0ZHjx6t9pjMzEyFhYV5\n",

"PXJzc+0eDQAA1BNbA2TTpk3atWuXtm/frqioKI0aNara4zIyMlReXu71SElJsXM0AABQj2x9CyYm\n",

"JkaS1KhRI02ZMkUJCQnVHud0OuV0Or22BQcH2zkaAACoR7a9AnLy5EmVlZV5fl66dKm6detm1+UA\n",

"AIAfse0VkNLSUg0dOlRut1uWZal9+/Z6+eWX7bocAADwI7YFSPv27fX555/bdXoAAODH+CRUAABg\n",

"HAECAACMI0AAAIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGEeAAAAA4wgQAABgHAECAACMI0AAAIBx\n",

"BAgAADCOAAEAAMYRIAAAwDgCBAAAGEeAAAAA4wgQAABgHAECAACMI0AAAIBxBAgAADCOAAEAAMYR\n",

"IAAAwDgCBAAAGEeAAAAA4wgQAABgHAECAACMI0AAAIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGEeA\n",

"AAAA4wgQAABgHAECAACMI0AAAIBxPgfI+vXr7ZgDAAA0ID4HyMyZM9WxY0fNmzdPFRUVdswEAAAC\n",

"nM8B8vHHH+uf//yn9uzZo4SEBE2cOFFffvmlHbMBAIAAVat7QLp166ZFixZp3bp1euedd9S1a1el\n",

"paVp9+7ddT0fAAAIQLUKkPfee0+DBw/WkCFD9Kc//UklJSUaP368fvOb39T1fAAAIACF+PqEa6+9\n",

"VlFRUZo8ebKGDBmi4OBgSdKdd96pxYsX1/mAAAAg8Pj8Csirr76qjz76SMOGDfPExw/Wrl1b7XOW\n",

"LFkih8Oht956q1ZDAgCAwOJzgGzbtk3Hjx/3/Hzs2DEtWrTooscXFBRo0aJFSk1Nrd2EAAAg4Pgc\n",

"IAsWLFBERITn58jISC1YsKDaY8+dO6exY8dq/vz5cjqdFz2ny+VSRUWF18Ptdvs6GgAA8BM+B4hl\n",

"WVW2XSwW5syZo5tuuknJycmXPGdmZqbCwsK8Hrm5ub6OBgAA/ITPAdK6dWstX77c8/OyZcvUunXr\n",

"Ksft2bNHK1as0EMPPfST58zIyFB5ebnXIyUlxdfRAACAn/D5r2Dmzp2rwYMH64EHHpAkXXXVVXr7\n",

"7berHPfRRx+poKBA8fHxkqSSkhKNGzdOxcXFmjBhgtexTqezyls0P77BFQAABA6fA6RTp0768ssv\n",

"lZeXJ0nq2LFjtbEwYcIEr9Do3bu3pkyZovT09NpPCwAAAoLPASJJDodD4eHhOnv2rA4fPixJiomJ\n",

"qdPBAABA4PI5QLKysjR58mQ1atRIQUHnbyFxOBw6cuTIJZ+3cePGWg0IAAACj88B8ve//11btmxR\n",

"x44d7ZgHAAA0AD7/FUxUVBTxAQAAfhafAyQ9PV1z587VkSNHvD44DAAAoKZ8fgvmwQcflCRNnTpV\n",

"DodDlmXJ4XDwyaUAAKDGfA6Qc+fO2TEHAABoQHx+C0Y6/4V0r7zyiiSprKxMxcXFdToUAAAIbLX6\n",

"Mro//OEPevTRRyWd/zbc4cOH1/VcAAAggPkcIC+88II+++wzhYaGSpKuueYaHT16tM4HAwAAgcvn\n",

"AHE6nWrcuLHXtpCQWn2gKgAAaKB8DpAWLVroq6++ksPhkHT+k1H5GHYAAOCLWn0b7u9//3vt3btX\n",

"bdu2VWhoqN555x07ZgMAAAHK5wDp0KGDNm/erLy8PFmWddFvwwUAALgYnwOksLBQktSkSRNJ4ttw\n",

"AQCAz3wOkOTkZM8noJ4+fVrfffedIiMjf/LbcAEAAH7gc4D8+E9uV65cqZ07d9bZQAAAIPDV6pNQ\n",

"LzRkyBCtWbOmLmYBAAANhM+vgFz4zbdut1ubN2/m23ABAIBPfA6Q8PBwzz0gwcHBio+P17PPPmvH\n",

"bAAAIEDxbbgAAMC4n30PCAAAgK98fgUkKCjI8zHsF7IsSw6HQ263u04GAwAAgcvnAJk5c6ZOnTql\n",

"CRMmSJKef/55NW7cWFOmTKnr2QAAQIDyOUBWrVqlbdu2eX6eNWuWkpOT9eCDD9bpYAAAIHD5fA/I\n",

"iRMnvD719MiRIzpx4kSdDgUAAAKbz6+A3H///UpMTNSgQYMkSevWrdOjjz5a13MBAIAA5nOAjB8/\n",

"XjfddJNycnIkSVOnTtX1119f54MBAIDA5XOASFJkZKS6dOmi3r176+zZszpz5oyuuOKKup4NAAAE\n",

"KJ/vAXnzzTeVmpqqe++9V5L0xRdfKD09va7nAgAAAcznAMnMzNT27dsVHh4uSUpMTNTBgwfrei4A\n",

"ABDAfA6Q4OBgRUZGem3j7RcAAOALnwOkWbNmKi0t9Xwa6vvvv6+IiIg6HwwAAAQun29CfeKJJzRw\n",

"4EDt379f//d//6cDBw5ozZo1dswGAAAClE8Bcu7cObndbuXk5OiTTz6RZVnq0aOH534QAACAmvAp\n",

"QIKCgjRu3Djt3LlTAwcOtGsmAAAQ4Hy+ByQ+Pl75+fl2zAIAABoIn+8BOX78uJKSktSjRw81bdrU\n",

"s33lypV1OhgAAAhcNQ6QcePG6YUXXtCoUaN0xx13qHnz5nbOBQAAAliNA2Tr1q2SpFGjRumGG27Q\n",

"9u3bbRsKAAAENp/vAZEky7Lqeg4AANCA1PgVkFOnTmn37t2yLEunT5/2/O8fdO3a1ZYBAQBA4PEp\n",

"QO644w7Pzxf+b4fDof3799ftZAAAIGDVOEAKCgp8PvmAAQNUUlKioKAgNWvWTM8++6y6devm83kA\n",

"AEBg8fnPcH2xfPlyz6ekrlq1SqNHj9bOnTvtvCQAAPADtgbIhR/RXl5e7vkCux9zuVxyuVxe29xu\n",

"t52jAQCAemRrgEjSyJEjlZOTI0l69913qz0mMzNTM2bM8NqWmppq92gAAKCe1OrPcH3x8ssvq6io\n",

"SLNmzdK0adOqPSYjI0Pl5eVej5SUFLtHAwAA9cT2APnBqFGjlJOTo2PHjlXZ53Q6FRoa6vUIDg42\n",

"NRoAADDMtgApKyvTN9984/n5rbfeUmRkpCIiIuy6JAAA8BO23QNSXl6uYcOG6dSpUwoKClKLFi30\n",

"zjvvXPRGVAAA0HDYFiCxsbHKzc216/QAAMCPGbsHBAAA4AcECAAAMI4AAQAAxhEgAADAOAIEAAAY\n",

"R4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAc\n",

"AQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEE\n",

"CAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEg\n",

"AADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHG2Bcjp06eVnp6uhIQEJSYmKi0tTfn5+XZd\n",

"DgAA+BFbXwEZN26c8vLytHPnTg0ePFhjx46183IAAMBP2BYgV155pQYNGiSHwyFJSk1NVUFBgV2X\n",

"AwAAfiTE1IXmzZunwYMHV7vP5XLJ5XJ5bXO73SbGAgAA9cDITaizZ89Wfn6+MjMzq92fmZmpsLAw\n",

"r0dubq6J0QAAQD2wPUCeeuoprVy5UmvXrtVVV11V7TEZGRkqLy/3eqSkpNg9GgAAqCe2vgUzZ84c\n",

"LV26VO+9957Cw8MvepzT6ZTT6fTaFhwcbOdoAACgHtkWIIcOHdL999+v9u3bq0+fPpLOh8bmzZvt\n",

"uiQAAPATtgVIdHS0LMuy6/QAAMCP8UmoAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEE\n",

"CAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEg\n",

"AADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AA\n",

"AADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIA\n",

"AIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYZ2uATJ48WXFxcXI4HNqxY4edlwIAAH7E1gC5\n",

"88479e9//1uxsbF2XgYAAPiZEDtPfvPNN9foOJfLJZfL5bXN7XbbMRIAALgM2BogNZWZmakZM2Z4\n",

"bUtNTa2naQAAuDzETV9j27kLHv+1beeuicviJtSMjAyVl5d7PVJSUup7LAAAYJPL4hUQp9Mpp9Pp\n",

"tS04OLiepgEAAHa7LF4BAQAADYutATJ+/HhFR0fr0KFDuuWWW9ShQwc7LwcAAPyErW/BLFy40M7T\n",

"AwAAP8VbMAAAwDgCBAAAGEeAAAAA4wgQAABgHAECAACMI0AAAIBxBAgAADCOAAEAAMYRIAAAwDgC\n",

"BAAAGEeAAAAA4wgQAABgHAECAACMI0AAAIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGEeAAAAA4wgQ\n",

"AABgHAECAACMI0AAAIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGEeAAAAA4wgQAABgHAECAACMI0AA\n",

"AIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGEeAAAAA4wgQAABgHAECAACMI0AAAIBxBAgAADCOAAEA\n",

"AMYRIAAAwDhbA+Trr79Wjx49lJCQoBtvvFFffPGFnZcDAAB+wtYAGT9+vMaNG6evvvpK06ZN0+jR\n",

"o+28HAAA8BO2BciRI0e0detW3X333ZKkoUOHqqioSPn5+VWOdblcqqio8Hq43W67RgMAAPUsxK4T\n",

"FxUVqXXr1goJOX8Jh8OhmJgYFRYWqkOHDl7HZmZmasaMGV7bOnXqpKlTp9b5XG63W61zc5WSkqLg\n",

"4OA6PffUqe/X6fn8mdvtVq5N64z/YZ3NYJ3NYJ2rGmLTed1ut371q1m2rHVsbKz+8pe//ORxDsuy\n",

"rDq98v+3bds2DR8+XHl5eZ5tKSkpevzxx9W3b1+vY10ul1wul9c2p9Mpp9NZ53NVVFQoLCxM5eXl\n",

"Cg0NrfPz4zzW2QzW2QzW2QzW2ZzLYa1tewWkbdu2Ki4u1tmzZxUSEiLLslRYWKiYmJgqx9oVGwAA\n",

"4PJk2z0gV199tW644Qa9+uqrkqQVK1YoOjq6ytsvAACg4bHtFRBJWrhwoUaPHq3Zs2crNDRUS5Ys\n",

"sfNyAADAT9gaIB07dtSnn35q5yV85nQ69cgjj/CWj81YZzNYZzNYZzNYZ3Muh7W27SZUAACAi+Gj\n",

"2AEAgHEECAAAMI4AAQAAxhEgAADAuAYVIHw7788TFxenjh07KikpSUlJSVq2bJmkS69rbfc1JJMn\n",

"T1ZcXJwcDod27Njh2W7HujbkNb/YOl/s91pinWvj9OnTSk9PV0JCghITE5WWlub5DrAjR47o1ltv\n",

"VXx8vDp37qxNmzZ5nmfHvkB2qXXu3bu32rVr5/mdfuaZZzzPu6zW2WpA+vTpYy1ZssSyLMt64403\n",

"rO7du9fvQH4mNjbW+vzzz6tsv9S61nZfQ/Lhhx9aRUVFVdbXjnVtyGt+sXW+2O+1ZbHOtXHq1Clr\n",

"zZo11rlz5yzLsqz58+dbvXr1sizLsu69917rkUcesSzLsnJzc602bdpYZ86csW1fILvUOvfq1cta\n",

"tWpVtc+7nNa5wQRIaWmp1axZM+v777+3LMuyzp07Z7Vs2dL6+uuv63ky/1Hdf6gvta613ddQXbi+\n",

"dqwra35eTQOEda4bW7ZssWJjYy3LsqwmTZpYxcXFnn033nijlZ2dbdu+huTCdb5UgFxO69xg3oK5\n",

"1LfzouZGjhypLl26aMyYMTp69Ogl17W2+3Dp31fWvO79+PdasuffQUM0b948DR48WMeOHdP333+v\n",

"Vq1aefbFxcWpsLDQln0NzQ/r/IPp06erS5cuuuuuu7R//35JuuzWucEECH6+TZs2adeuXdq+fbui\n",

"oqI0atSo+h4J+Nn4vbbP7NmzlZ+fr8zMzPoeJaD9eJ1feeUV7d27V7t27VLPnj1122231fOE1Wsw\n",

"AXLht/NKuuS386J6P6xVo0aNNGXKFH300UeXXNfa7sOlf19Z87pV3e+1ZM+/g4bkqaee0sqVK7V2\n",

"7VpdddVVioyMVEhIiEpKSjzHFBQUKCYmxpZ9DcWP11k6/7srnX/1bdKkSdq/f7+OHTt22a1zgwkQ\n",

"vp335zl58qTKyso8Py9dulTdunW75LrWdh8u/fvKmtedi/1eS/b8O2go5syZo6VLlyo7O1vh4eGe\n",

"7cOGDdPzzz8vSdqyZYsOHz6sXr162bYv0FW3zmfPnlVpaannmBUrVqhly5aKjIyUdJmt88+6g8TP\n",

"7N2710pNTbXi4+Ot5ORka9euXfU9kt/Yt2+flZSUZHXp0sXq3Lmzdccdd1gHDhywLOvS61rbfQ3J\n",

"uHHjrDZt2ljBwcHW1VdfbV1zzTWWZdmzrg15zatb50v9XlsW61wbRUVFliSrffv2VmJiopWYmGil\n",

"pKRYlmVZJSUlVlpamtWhQwfruuuusz744APP8+zYF8guts6VlZVWcnKy1blzZ6tr165W3759rR07\n",

"dniedzmtM19GBwAAjGswb8EAAIDLBwECAACMI0AAAIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGEeA\n",

"AAAA4wgQAABgHAECAACM+3/D519+ghG22AAAAABJRU5ErkJggg==\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-2f8b1436-f185-457a-8656-2db6cdfb19f4\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-2f8b1436-f185-457a-8656-2db6cdfb19f4\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x786710ef1f00>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">2-d distributions</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_25.plot(kind='scatter', x='Index', y='Height(Inches)', s=32, alpha=.8)\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-c4aeeeb4-a362-4d78-8c7d-014593ffd1ce\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAj0ElEQVR4nO3de3DU9b3/8ddmN9lwSYICCQiEFUOwlpAFTUpoKXihIjLCEZSO\n",

"gsTRAY/DoTR1BGbaQ+35lZQphkGdFqczpmp6EBXLcYZCi6ICKgSFSInlEi4m0FxokHCRbLKb7+8P\n",

"6o6RiLthv7ubT56PmZ2S/exm3/lsEp/d/W7WYVmWJQAAAIMlxHoAAAAAuxE8AADAeAQPAAAwHsED\n",

"AACMR/AAAADjETwAAMB4BA8AADAewQMAAIxH8Pzb6tWrYz0CAACwCcHzb5999lmsRwAAADYheAAA\n",

"gPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcA\n",

"ANiquTWgf533qbk1ELMZXDG7ZQAAYLRT53wq23lcm/fX62JrQD0Snbpr5ADNLhiqfr3dUZ3Ftkd4\n",

"mpubNX36dGVnZys3N1eTJk1SVVWVJGnixIm6/vrr5fV65fV6tWrVquD1GhoaNHnyZA0fPlwjR47U\n",

"tm3brnoNAABE16lzPv3X2r36065qXfD55Upw6ILPr7Jdn2nB/+7Vv877ojqPrU9pzZs3TwcPHtQn\n",

"n3yiadOm6dFHHw2urVq1ShUVFaqoqNBPf/rT4PlLlizR2LFjdfjwYZWWluqBBx5Qa2vrVa0BAIDo\n",

"Ktt5XFUN59S/t1vX9EpSL7dL1/RKUv/eblU1nFPZh59FdR7bgic5OVlTpkyRw+GQJI0dO1bHjx//\n",

"1uu9+uqreuyxxyRJeXl5uu666/Tee+9d1drX+Xw+nT17tt0pEIjd84oAAJikuTWgzfvrlexyyuVs\n",

"nxouZ4LcLqc2VdZF9ZieqB20vHr1ak2bNi348ZIlS5STk6NZs2bp6NGjkqTGxka1trZqwIABwct5\n",

"PB5VV1d3eq0jxcXFSktLa3cqLy+P9JcMAEC3dN7n18XWgJJcHWeG25Wgiy0Bnff5ozZTVIJn+fLl\n",

"qqqqUnFxsSTp5Zdf1oEDB7Rv3z6NHz9eU6dOjcYYQUuXLlVTU1O7U35+flRnAADAVL3dLvVIdKrF\n",

"39bhus/fph5JTvV2R++1U7YHz8qVK/XGG29o06ZN6tmzpyRpyJAhkiSHw6EFCxbo6NGjamxsVN++\n",

"feVyuVRXVxe8/vHjx5WZmdnptY643W6lpqa2OzmdTju+fAAAup3kRKcmj8xQsz8gf6B99PgDbfL5\n",

"A7rruwOUnBi9//baGjwlJSVau3attmzZoj59+kiS/H6/6uvrg5dZv369MjIy1LdvX0nSfffdpzVr\n",

"1kiSdu/erZMnT2rChAlXtQYAAKJrToFHWekpOnXep9MXWnTB59fpCy06dd6n4ekpml0wNKrz2PZY\n",

"0okTJ/Szn/1Mw4YN06233irp0iMrW7du1d133y2fz6eEhAT169dPb775ZvB6K1as0Jw5czR8+HAl\n",

"JSWprKxMiYmJV7UGAACiq19vt557YLTKPvxMmyrrdLEloN7JLt333cEx+Ts8DsuyrKjeYpwqKipS\n",

"SUlJrMcAAMA4za2XDlDu7XZF9Wmsr+IvLQMAAFslJzpjFjpf4r20AACA8QgeAABgPIIHAAAYj+AB\n",

"AADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8Qge\n",

"AABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/g\n",

"AQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEI\n",

"HgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP\n",

"4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDx\n",

"CB4AAGA8ggcAABiP4AEAAMYjeAAAgPFsC57m5mZNnz5d2dnZys3N1aRJk1RVVSVJamho0OTJkzV8\n",

"+HCNHDlS27ZtC17PjjUAANC92foIz7x583Tw4EF98sknmjZtmh599FFJ0pIlSzR27FgdPnxYpaWl\n",

"euCBB9Ta2mrbGgAA6N5sC57k5GRNmTJFDodDkjR27FgdP35ckvTqq6/qsccekyTl5eXpuuuu03vv\n",

"vWfb2tf5fD6dPXu23SkQCNiwCwAAIB5E7Rie1atXa9q0aWpsbFRra6sGDBgQXPN4PKqurrZlrSPF\n",

"xcVKS0trdyovL7fhqwYAAPEgKsGzfPlyVVVVqbi4OBo3962WLl2qpqamdqf8/PxYjwUAAGxie/Cs\n",

"XLlSb7zxhjZt2qSePXuqb9++crlcqqurC17m+PHjyszMtGWtI263W6mpqe1OTqfThq8eAADEA1uD\n",

"p6SkRGvXrtWWLVvUp0+f4Pn33Xef1qxZI0navXu3Tp48qQkTJti2BgAAujeHZVmWHZ/4xIkTGjJk\n",

"iIYNG6aUlBRJlx5Z2bVrl+rr6zVnzhwdO3ZMSUlJeu6553TrrbdKki1roSgqKlJJSUmEdwEAAMQD\n",

"24KnqyF4AAAwF39pGQAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8\n",

"ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADG\n",

"I3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABg\n",

"PIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAA\n",

"xiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAA\n",

"YDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEA\n",

"AMbrdPC0tLR862UWLlwoj8cjh8OhioqK4Pkej0cjRoyQ1+uV1+vVunXrgmuHDx/WuHHjlJ2drby8\n",

"PFVWVl71GgAA6N7CCp53331XP/7xj9W/f38lJycrKSlJY8aM0fLly3X69OnLLj9z5kzt2LFDQ4cO\n",

"vWxt3bp1qqioUEVFhWbNmhU8f/78+Zo3b54OHTqkxYsXq7Cw8KrXAABA9xZy8EyZMkXPPPOM7r33\n",

"Xu3Zs0c+n0+NjY1as2aN/H6/brvtNm3evLnddX74wx9q8ODBIQ/T0NCgjz76SLNnz5YkzZgxQzU1\n",

"Naqqqur0Wkd8Pp/Onj3b7hQIBEKeEwAAdC2uUC+4YsUK5eTktDsvMTFR+fn5ys/P19KlS3Xs2LGQ\n",

"b/ihhx6SZVnKz8/Xb37zG/Xv3181NTUaOHCgXK5LYzkcDmVmZqq6ulppaWmdWsvKyrrstouLi/XU\n",

"U0+1O2/s2LEhzw4AALqWkB/h+XrsSJJlWTp37pykS/GTnZ0d0ufatm2b9u3bpz179qhfv36aO3du\n",

"qGNExNKlS9XU1NTulJ+fH9UZAABA9IR90PIjjzyiM2fOqKWlRV6vVxkZGfrd734X1ufIzMyUdCmS\n",

"Fi1apO3bt0uShgwZotraWvn9fkmXgqq6ulqZmZmdXuuI2+1Wampqu5PT6Qx3KwAAQBcRdvB8/PHH\n",

"6tOnjzZv3qzRo0errq5Oa9asCfn6Fy5c0JkzZ4Ifr127VqNHj5Ykpaena8yYMSorK5MkrV+/XoMH\n",

"D1ZWVlan1wAAAEI+hudLlmVJkrZv366pU6de8dGR+fPna+PGjaqrq9Odd96plJQU/e1vf9OMGTMU\n",

"CARkWZaGDRuml156KXid559/XoWFhVq+fLlSU1NVWlp61WsAAKB7c1hfFkyI7rzzTg0bNkybNm1S\n",

"RUWFevXqpZtvvln79u2za8aoKCoqUklJSazHAAAANgj7Ka0//elPGjFihF555RX16dNHJ0+eVFFR\n",

"kR2zAQAARETYwdOvXz/NmjVLzc3NkqRBgwbpgQceiPhgAAAAkRJ28Lz++usaO3Zs8C8Zf/rpp5o+\n",

"fXqExwIAAIicsIOnuLhYe/bs0TXXXCNJys3N1WeffRbxwQAAACIl7OBxOp3q27dvu/OSkpIiNhAA\n",

"AECkhR08KSkpqq+vl8PhkCS9/fbbuvbaayM+GAAAQKSE/Xd4VqxYobvuuktHjx7VD37wAx07dkwb\n",

"N260YzYAAICICDt4brnlFr3zzjv64IMPZFmWxo0bpz59+tgwGgAAQGSEHTySlJaWprvuuivSswAA\n",

"ANgi7GN4Nm/erBtvvFFJSUlyOp1KSEjgjTcBAEBcC/sRnoULF+rZZ59VQUEBoQMAALqEsIMnNTVV\n",

"d955px2zAAAA2CLsp7SmTp2qDRs22DAKAACAPUJ+hOeaa66Rw+GQZVlqampSjx495Ha7ZVmWHA6H\n",

"Tp8+beecAAAAnRZy8FRUVNg4BgAAgH1CDp6hQ4dKkqqrq5Wenq7k5GRJUnNzs06dOmXPdAAAABEQ\n",

"9jE8M2fObPexZVmXnQcAABBPwg6elpaW4KM7ktSjRw/5fL6IDgUAABBJYQePw+FQQ0ND8OO6ujpZ\n",

"lhXRoQAAACKpU394sKCgQHPmzJEklZWVadmyZREfDAAAIFLCDp6HH35Y119/vf7yl79IkkpLSzV+\n",

"/PiIDwYAABApnXrz0IkTJ2rixIkRHgUAAMAeYQfP8ePHtWLFCh05ckR+vz94/tatWyM6GAAAQKSE\n",

"HTz333+/br/9di1YsIA3DwUAAF1C2MHT3Nys4uJiO2YBAACwRdgvSx85cqSqq6vtmAUAAMAWYT/C\n",

"c+rUKeXm5qqgoKDdHyB84403IjoYAABApIQdPLNnz9bs2bPtmAUAAMAWYQfP3Llz7ZgDAADANiEH\n",

"T1FR0RXXS0pKrnoYAAAAO4QcPGlpaXbOAQAAYJuQg4f3ywIAAF1VyC9L37Vr1xXXL168qE8//fSq\n",

"BwIAAIi0kIPn6aef1qRJk1RaWqpPP/1UjY2NOnnypLZu3aonn3xSBQUFqq+vt3NWAACATgn5Ka1X\n",

"X31Vu3fv1vPPP69f//rXOnHihHr16qVRo0ZpxowZev/999WrVy87ZwUAAOiUsF6WnpeXp7y8PLtm\n",

"AQAAsEXYby3x+OOPh3QeAABAvAg7eHbu3HnZeR988EFEhgEAALBDyE9prVu3Tq+88oqOHTume++9\n",

"N3h+U1OTevfubctwAAAAkRBy8Nx4442aNm2a9uzZo2nTpgXPT01N1e23327LcAAAAJEQcvDk5uYq\n",

"NzdXd999t/r372/nTAAAABEV9puHJiYmasWKFTpy5Ij8fn/w/BdeeCGigwEAAERK2MEzc+ZM9e/f\n",

"XwUFBXI6nXbMBAAAEFFhB09tba3eeustO2YBAACwRdgvS7/hhht05swZG0YBAACwR8iP8BQVFUmS\n",

"evbsqTFjxmjy5MlKTk4OrpeUlER+OgAAgAgIOXjS0tKC//ud73zHtoEAAAAiLeTgWbZsmZ1zAAAA\n",

"2Cbsg5Z/9atfXXZenz59VFBQwBuLAgCAuBT2Qcv/+Mc/9Pvf/141NTU6ceKE1qxZo3fffVcPPvig\n",

"nnnmGTtmBAAAuCphP8Lz+eefq6KiQhkZGZKk+vp6zZkzRzt37tT48eO1cOHCiA8JAABwNcJ+hOfE\n",

"iRPB2JGkjIwM/fOf/9S1116rxMTEiA4HAAAQCWEHz6BBg/TUU0+ppqZGNTU1+tWvfqXrrrtOgUBA\n",

"DofDjhkBAACuStjB8+KLL6qyslJer1der1f79+/XH//4R7W2tuqll16yY0YAAICrEvYxPAMGDNCr\n",

"r77a4VpOTs5VDwQAABBpIQfPe++9pwkTJujNN9/scP2ee+6J2FAAAACRFHLwlJWVacKECVq1atVl\n",

"aw6Hg+ABAABxK+Tg+cMf/iBJeuedd2wbBgAAwA5hH7Ts9/v19NNP6/HHH5ckHTlyRFu3bu3wsgsX\n",

"LpTH45HD4VBFRUXw/MOHD2vcuHHKzs5WXl6eKisrbV0DAADdW9jBs2DBAh04cCD4SE/fvn315JNP\n",

"dnjZmTNnaseOHRo6dGi78+fPn6958+bp0KFDWrx4sQoLC21dAwAA3ZvDsiwrnCt4vV5VVFRo9OjR\n",

"2rt3ryQpNzdXn3zyyTdex+PxaMOGDfJ6vWpoaFBWVpZOnz4tl8sly7I0cOBA7dixQ6mpqRFfy8rK\n",

"CunrKioqUklJSThbAQAAuoiwX5aenJzc7uNAIKC2traQr19TU6OBAwfK5bp00w6HQ5mZmaqurlZa\n",

"WlrE1zoKHp/PJ5/Pd9nXAQAAzBT2U1qjRo1SWVmZ2traVFVVpfnz52vixIk2jGaf4uJipaWltTuV\n",

"l5fHeiwAAGCTsIOnpKRE27dvV11dnb7//e/L6XRqxYoVIV9/yJAhqq2tld/vlyRZlqXq6mplZmba\n",

"staRpUuXqqmpqd0pPz8/3K0AAABdRMhPaX31Dw7efffdmjJliqRLTx+99dZbIf8dnvT0dI0ZM0Zl\n",

"ZWUqLCzU+vXrNXjw4OBTT3asfZ3b7Zbb7W53ntPpDHUrAABAFxPyQcu33npr8N8ff/yxbrnlFn15\n",

"VYfD0eFL0+fPn6+NGzeqrq5Offv2VUpKiqqqqnTw4EEVFhaqsbFRqampKi0tDb4thR1roeCgZQAA\n",

"zBX2q7QktXuFlikIHgAAzBX2MTzSpUd0AAAAuopOBQ8AAEBXEvJBy/v27Qv+++LFi/r73/+urz4b\n",

"NmrUqMhOBgAAECEhB8+0adPaffzVV2U5HA4dPXo0clMBAABEUMjBc+zYMTvnAAAAsA3H8AAAAOMR\n",

"PAAAwHgEDwAAMB7BAwAAjEfwAAAA4xE8AADAeAQPAAAwHsEDAACMR/AAAADjETwAAMB4BA8AADAe\n",

"wQMAAIxH8AAAAOMRPAAAwHgEDwAAMB7BAwAAjEfwAAAA4xE8AADAeAQPAAAwHsEDAACMR/AAAADj\n",

"ETwAAMB4BA8AADAewQMAAIxH8AAAAOMRPAAAwHgEDwAAMB7BAwAAjEfwAAAA4xE8AADAeAQPAAAw\n",

"HsEDAACMR/AAAADjETwAAMB4BA8AADAewQMAAIxH8AAAAOMRPAAAwHgEDwAAMB7BAwAAjEfwAAAA\n",

"4xE8AADAeAQPAAAwHsEDAACMR/AAAADjETwAAMB4BA8AADAewQMAAIxH8AAAAOMRPAAAwHgEDwAA\n",

"MB7BAwAAjEfwAAAA4xE8AADAeDELHo/HoxEjRsjr9crr9WrdunWSpMOHD2vcuHHKzs5WXl6eKisr\n",

"g9fp7BoAAOjeYvoIz7p161RRUaGKigrNmjVLkjR//nzNmzdPhw4d0uLFi1VYWBi8fGfXAABA9+aw\n",

"LMuKxQ17PB5t2LBBXq83eF5DQ4OysrJ0+vRpuVwuWZalgQMHaseOHUpNTe3UWlZW1mW37fP55PP5\n",

"2p33i1/8QqtXr7b7ywYAADEQ00d4HnroIeXk5OiRRx7RqVOnVFNTo4EDB8rlckmSHA6HMjMzVV1d\n",

"3em1jhQXFystLa3dqby8PDpfNAAAiLqYBc+2bdu0b98+7dmzR/369dPcuXOjdttLly5VU1NTu1N+\n",

"fn7Ubh8AAESXK1Y3nJmZKUlKTEzUokWLlJ2drSFDhqi2tlZ+vz/41FR1dbUyMzOVmpraqbWOuN1u\n",

"ud3uduc5nU7bv2YAABAbMXmE58KFCzpz5kzw47Vr12r06NFKT0/XmDFjVFZWJklav369Bg8erKys\n",

"rE6vAQAAxOSg5aNHj2rGjBkKBAKyLEvDhg3T6tWr5fF4dPDgQRUWFqqxsVGpqakqLS1VTk6OJHV6\n",

"LRRFRUUqKSmx5esFAACxFbNXacUbggcAAHPxl5YBAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEI\n",

"HgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP\n",

"4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDx\n",

"CB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAY\n",

"j+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA\n",

"8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAA\n",

"GI/gsVlza0D/Ou9Tc2sg1qOgk7gPu7amL1p0qP6cmr5oifUo6CR+Bru+eLgPXTG7ZcOdOudT2c7j\n",

"2ry/XhdbA+qR6NRdIwdodsFQ9evtjvV4CEEk78Pm1oDO+/zq7XYpOdFp08T4qgO1Z/Xf/7dfFSea\n",

"1NZmKSHBodFD+uh/po9UdkZKrMdDCPg92vXF033osCzLiuotxqmioiKVlJRE5HOdOufTf63dq6qG\n",

"c0p2OZXkSlCLv03N/oCy0lP03AOj+WGNc5G6D+Pph707OVB7Vvc//6HONfuV4JAcCQ5ZbZbaLCkl\n",

"2aXX/3Mc0RPn+D3a9cXbfWjUU1qHDx/WuHHjlJ2drby8PFVWVsZkjrKdx1XVcE79e7t1Ta8k9XK7\n",

"dE2vJPXv7VZVwzmVffhZTOZC6CJxH375w/6nXdW64PPLleDQBZ9fZbs+04L/3at/nfdF4Svpnv77\n",

"//brXLNfSU6HklxOJSYkKMnlVJLToXPNfv1iw/5Yj4hvwe/Rri/e7kOjgmf+/PmaN2+eDh06pMWL\n",

"F6uwsDDqMzS3BrR5f72SXU65nO231+VMkNvl1KbKOp6LjmORug/j7Ye9u2j6okUVJ5qU4JASEtrf\n",

"fwkJCUpwSHtrznBMTxzj92jXF4/3oTHB09DQoI8++kizZ8+WJM2YMUM1NTWqqqq67LI+n09nz55t\n",

"dwoEIrPp531+XWwNKMnV8da6XQm62HLpeA7Ep0jch/H4w95d1J/zqa3NkiPB0eG6I8GhtjZL9ed4\n",

"hC1e8Xu064vH+9CY4KmpqdHAgQPlcl06DtvhcCgzM1PV1dWXXba4uFhpaWntTuXl5RGZo7fbpR6J\n",

"TrX42zpc9/nb1CPJqd5ujhePV5G4D+Pxh727yEhxK+Hfx+x0xPr3AcwZKRz/Ea/4Pdr1xeN9aEzw\n",

"hGPp0qVqampqd8rPz4/I505OdGryyAw1+wPyB9rf0f5Am3z+gO767gBeqRPHInEfxuMPe3eR1jNJ\n",

"3sFparOktrb2+9/W1qY2Sxo9pI/SeibFaEJ8G36Pdn3xeB8aEzxDhgxRbW2t/P5L/4/ZsixVV1cr\n",

"MzPzssu63W6lpqa2Ozmdkdv0OQUeZaWn6NR5n05faNEFn1+nL7To1HmfhqenaHbB0IjdFuxxtfdh\n",

"PP6wdyf/7z9ylJLsUkvAUos/oNa2NrX4A2oJWEpJdul/po+M9Yj4Fvwe7fri7T40JnjS09M1ZswY\n",

"lZWVSZLWr1+vwYMHKysrK+qz9Ovt1nMPjNbs7w1V72SX/G2Weie7NPt7Q/UsL6XsEiJxH8bbD3t3\n",

"kp2Rotf/c5zyr79WTmeCZElOZ4Lyr7+Wl6R3Efwe7fri7T406u/wHDx4UIWFhWpsbFRqaqpKS0uV\n",

"k5MT0nUj+Xd4voo/ONf1Xc19+K/zPpV9+Jk2VdbpYktAPZKcuuu7/B2eaGr6okX153zKSHHzNFYX\n",

"xe/Rri8e7kOjgudq2BU8gBQfP+wA0J1xxCQQBcmJTkIHAGLImGN4AAAAvgnBAwAAjEfwAAAA4xE8\n",

"AADAeAQPAAAwHsEDAACMR/AAAADjETwAAMB4BA8AADAewQMAAIzHe2n927333iuPxxPxzxsIBFRe\n",

"Xq78/Hw5nby1gF3Y5+hgn6ODfY4e9jo67NznoUOH6ic/+cm3Xo7gsdnZs2eVlpampqYmpaamxnoc\n",

"Y7HP0cE+Rwf7HD3sdXTEwz7zlBYAADAewQMAAIxH8AAAAOMRPDZzu91atmyZ3G53rEcxGvscHexz\n",

"dLDP0cNeR0c87DMHLQMAAOPxCA8AADAewQMAAIxH8AAAAOMRPDY6fPiwxo0bp+zsbOXl5amysjLW\n",

"I3UpHo9HI0aMkNfrldfr1bp16yRdeV87u9adLFy4UB6PRw6HQxUVFcHz7djX7rzn37TP3/R9LbHP\n",

"ndHc3Kzp06crOztbubm5mjRpkqqqqiRJDQ0Nmjx5soYPH66RI0dq27ZtwevZsWayK+3zxIkTdf31\n",

"1we/p1etWhW8XlztswXb3HrrrVZpaallWZb12muvWbfccktsB+pihg4dau3du/ey86+0r51d607e\n",

"e+89q6am5rL9tWNfu/Oef9M+f9P3tWWxz51x8eJFa+PGjVZbW5tlWZb17LPPWhMmTLAsy7Iefvhh\n",

"a9myZZZlWVZ5ebk1aNAgq6WlxbY1k11pnydMmGD9+c9/7vB68bTPBI9N6uvrrZSUFKu1tdWyLMtq\n",

"a2uzMjIyrMOHD8d4sq6jo/8wXGlfO7vWXX11f+3YV/b8klCDh32OjN27d1tDhw61LMuyevXqZdXW\n",

"1gbX8vLyrC1btti21p18dZ+vFDzxtM88pWWTmpoaDRw4UC6XS5LkcDiUmZmp6urqGE/WtTz00EPK\n",

"ycnRI488olOnTl1xXzu7hit/v7Lnkff172vJnvugO1q9erWmTZumxsZGtba2asCAAcE1j8ej6upq\n",

"W9a6my/3+UtLlixRTk6OZs2apaNHj0pS3O0zwYO4tW3bNu3bt0979uxRv379NHfu3FiPBFw1vq/t\n",

"s3z5clVVVam4uDjWoxjt6/v88ssv68CBA9q3b5/Gjx+vqVOnxnjCjhE8NhkyZIhqa2vl9/slSZZl\n",

"qbq6WpmZmTGerOv4cq8SExO1aNEibd++/Yr72tk1XPn7lT2PrI6+ryV77oPuZOXKlXrjjTe0adMm\n",

"9ezZU3379pXL5VJdXV3wMsePH1dmZqYta93F1/dZuvS9K116dHHBggU6evSoGhsb426fCR6bpKen\n",

"a8yYMSorK5MkrV+/XoMHD1ZWVlaMJ+saLly4oDNnzgQ/Xrt2rUaPHn3Ffe3sGq78/cqeR843fV9L\n",

"9twH3UVJSYnWrl2rLVu2qE+fPsHz77vvPq1Zs0aStHv3bp08eVITJkywbc10He2z3+9XfX198DLr\n",

"169XRkaG+vbtKynO9vmqjgDCFR04cMAaO3asNXz4cOvmm2+29u3bF+uRuowjR45YXq/XysnJsUaO\n",

"HGndc8891rFjxyzLuvK+dnatO5k3b541aNAgy+l0Wunp6dYNN9xgWZY9+9qd97yjfb7S97Vlsc+d\n",

"UVNTY0myhg0bZuXm5lq5ublWfn6+ZVmWVVdXZ02aNMnKysqybrrpJmvr1q3B69mxZrJv2ufz589b\n",

"N998szVy5Ehr1KhR1m233WZVVFQErxdP+8x7aQEAAOPxlBYAADAewQMAAIxH8AAAAOMRPAC6DI/H\n",

"0+59qULxxBNP6Je//KUt8wDoOggeAABgPIIHQJczceJEPfHEExo/frxuuOEGPfbYY8G12tpa3Xnn\n",

"nbrpppt0xx136MSJE8G11tZWLVmyRPn5+fJ6vbr//vv1+eef69SpU/J4PNq5c6ck6fXXX1dubq4u\n",

"XrwY9a8NgD0IHgBd0pEjR/TOO+9o//79+utf/6oPP/xQkrRw4ULl5+fr008/1Ysvvqi33347eJ3f\n",

"/va36tWrl8rLy1VRUaGcnBz9/Oc/V//+/fXyyy/rwQcfVHl5uRYtWqTXXntNPXr0iNWXByDCXLEe\n",

"AAA6Y9asWXK5XHK5XPJ6vTpy5IgKCgr09ttva+XKlZKkQYMG6Z577gleZ8OGDWpqatL69eslSS0t\n",

"LfJ4PJKk8ePH65FHHtG4ceP00ksvKTs7O+pfEwD7EDwAuqTk5OTgv51OZ/C9pL7O4XAE/21Zlp59\n",

"9ln96Ec/6vCye/fuVf/+/VVTUxPZYQHEHE9pATDKHXfcoRdeeEHSpeN53nzzzeDa9OnTtWrVKn3x\n",

"xReSpC+++EKVlZWSpOeee06ff/65PvnkEz3//PN6//33oz88ANvwCA8Ao6xevVqFhYW66aabNGjQ\n",

"IN12223BtcWLF8vn8+l73/te8JGfL89buXKldu3apfT0dJWVlWn27NnavXt38E0QAXRtvJcWAAAw\n",

"Hk9pAQAA4xE8AADAeAQPAAAwHsEDAACMR/AAAADjETwAAMB4BA8AADAewQMAAIxH8AAAAOMRPAAA\n",

"wHj/H7AP7zCeeTKyAAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-c4aeeeb4-a362-4d78-8c7d-014593ffd1ce\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-c4aeeeb4-a362-4d78-8c7d-014593ffd1ce\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_26.plot(kind='scatter', x='Height(Inches)', y='Weight(Pounds)', s=32, alpha=.8)\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-e87d3be0-551a-4c83-890a-488246fc4087\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAl/UlEQVR4nO3de1TU953/8dc4g0O8gK0KmiiiRbJruIwXKNgaL4lZYtLoz0ts\n",

"bEzIJkWb+HMtOdvontOY9beVetbgoclJdbtbsg2pUQ+uv551dVfjBa2JaA2SmIqiEsCAuBjxErkN\n",

"398fbuZXKpIZnC/gh+fjnDkN85lh3vMJbZ/nO9+ZcViWZQkAAMBgvbp6AAAAALsRPAAAwHgEDwAA\n",

"MB7BAwAAjEfwAAAA4xE8AADAeAQPAAAwHsEDAACMR/D8j5ycnK4eAQAA2ITg+R+fffZZV48AAABs\n",

"QvAAAADjETwAAMB4BA8AADAewQMAAIxH8AAAAOMRPAAAwHgEDwAAMB7BAwAAjEfwAAAA4xE8AADA\n",

"eAQPAACwVX2TV/99rUH1Td4um8HVZY8MAACMdvFqg/I+LNPOTy7oRpNX94Q49WjcED2dOkKD+rk7\n",

"dRbbjvDU19dr1qxZio2NVWJioqZPn67S0lJJ0pQpUzRy5Eh5PB55PB6tW7fOd7+amhqlpaVp9OjR\n",

"iouLU0FBwR2vAQCAznXxaoP+98aP9O7hcl1vaJarl0PXG5qVd/gzLfntR/rvaw2dOo+tL2llZGSo\n",

"pKREx48f18yZM/XCCy/41tatW6eioiIVFRXpxz/+se/65cuXKyUlRadPn1Zubq4WLFigpqamO1oD\n",

"AACdK+/DMpXWXNXgfm59o29v9XW79I2+vTW4n1ulNVeV98FnnTqPbcETGhqqGTNmyOFwSJJSUlJU\n",

"Vlb2tffbvHmzFi9eLElKSkrSvffeq/3799/R2p9raGjQlStXWl283q57XREAAJPUN3m185MLCnU5\n",

"5XK2Tg2Xs5fcLqd2nKju1HN6Ou2k5ZycHM2cOdP38/LlyxUfH6/58+fr7NmzkqTa2lo1NTVpyJAh\n",

"vttFR0ervLy8w2ttycrKUnh4eKtLYWFhsJ8yAAA90rWGZt1o8qq3q+3McLt66UajV9camjttpk4J\n",

"ntWrV6u0tFRZWVmSpHfeeUcnT55UcXGxJk2apMcff7wzxvBZsWKF6urqWl2Sk5M7dQYAAEzVz+3S\n",

"PSFONTa3tLne0Nyie3o71c/dee+dsj141q5dq61bt2rHjh3q06ePJGn48OGSJIfDoSVLlujs2bOq\n",

"ra3VwIED5XK5VF1d7bt/WVmZoqKiOrzWFrfbrbCwsFYXp9Npx9MHAKDHCQ1xKi0uUvXNXjV7W0dP\n",

"s7dFDc1ePfrAEIWGdN7/99oaPNnZ2dq4caN27dqlAQMGSJKam5t14cIF323y8/MVGRmpgQMHSpLm\n",

"zZun9evXS5KOHDmi8+fPa/LkyXe0BgAAOtfC1GjFRPTXxWsNunS9UdcbmnXpeqMuXmvQ6Ij+ejp1\n",

"RKfOY9uxpMrKSr388ssaNWqUpk6dKunmkZU9e/boscceU0NDg3r16qVBgwbpd7/7ne9+a9as0cKF\n",

"CzV69Gj17t1beXl5CgkJuaM1AADQuQb1c+vNBWOV98Fn2nGiWjcaveoX6tK8B4Z1yefwOCzLsjr1\n",

"EbupzMxMZWdnd/UYAAAYp77p5gnK/dyuTn0Z60/xScsAAMBWoSHOLgudr/BdWgAAwHgEDwAAMB7B\n",

"AwAAjEfwAAAA4xE8AADAeAQPAAAwHsEDAACMR/AAAADjETwAAMB4BA8AADAewQMAAIxH8AAAAOMR\n",

"PAAAwHgEDwAAMB7BAwAAjEfwAAAA4xE8AADAeAQPAAAwHsEDAACMR/AAAADjETwAAMB4BA8AADAe\n",

"wQMAAIxH8AAAAOMRPAAAwHgEDwAAMB7BAwAAjEfwAAAA4xE8AADAeAQPAAAwHsEDAACMR/AAAADj\n",

"ETwAAMB4BA8AADAewQMAAIxH8AAAAOMRPAAAwHgEDwAAMB7BAwAAjEfwAAAA4xE8AADAeAQPAAAw\n",

"HsEDAACMR/AAAADjETwAAMB4BA8AADAewQMAAIxH8AAAAOMRPAAAwHgEDwAAMB7BAwAAjEfwAAAA\n",

"4xE8AADAeAQPAAAwHsEDAACMR/AAAADjETwAAMB4tgVPfX29Zs2apdjYWCUmJmr69OkqLS2VJNXU\n",

"1CgtLU2jR49WXFycCgoKfPezYw0AAPRsth7hycjIUElJiY4fP66ZM2fqhRdekCQtX75cKSkpOn36\n",

"tHJzc7VgwQI1NTXZtgYAAHo224InNDRUM2bMkMPhkCSlpKSorKxMkrR582YtXrxYkpSUlKR7771X\n",

"+/fvt23tzzU0NOjKlSutLl6v14ZdAAAA3UGnncOTk5OjmTNnqra2Vk1NTRoyZIhvLTo6WuXl5bas\n",

"tSUrK0vh4eGtLoWFhTY8awAA0B10SvCsXr1apaWlysrK6oyH+1orVqxQXV1dq0tycnJXjwUAAGxi\n",

"e/CsXbtWW7du1Y4dO9SnTx8NHDhQLpdL1dXVvtuUlZUpKirKlrW2uN1uhYWFtbo4nU4bnj0AAOgO\n",

"bA2e7Oxsbdy4Ubt27dKAAQN818+bN0/r16+XJB05ckTnz5/X5MmTbVsDAAA9m8OyLMuOX1xZWanh\n",

"w4dr1KhR6t+/v6SbR1YOHz6sCxcuaOHChTp37px69+6tN998U1OnTpUkW9b8kZmZqezs7CDvAgAA\n",

"6A5sC567DcEDAIC5+KRlAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAA\n",

"gPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcA\n",

"ABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gA\n",

"AIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIH\n",

"AAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4\n",

"AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABivQ8HT2NgY7DkAAABs43fw7Nu3\n",

"T9///vc1ePBghYaGqnfv3ho3bpxWr16tS5cu2TkjAADAHfEreGbMmKFf/OIXmj17to4dO6aGhgbV\n",

"1tZq/fr1am5u1rRp07Rz5067ZwUAAOgQh2VZ1tfd6OOPP1Z8fPxt15uamnTu3DnFxsYGdbjOlJmZ\n",

"qezs7K4eAwAA2MCvIzxtxY5lWbp69aokKSQkpM3YWbp0qaKjo+VwOFRUVOS7Pjo6Wvfff788Ho88\n",

"Ho82bdrkWzt9+rQmTpyo2NhYJSUl6cSJE3e8BgAAeraATlp+/vnndfnyZTU2Nsrj8SgyMlJvvfXW\n",

"bW8/d+5cHTx4UCNGjLhlbdOmTSoqKlJRUZHmz5/vu37RokXKyMjQqVOn9Morryg9Pf2O1wAAQM8W\n",

"UPD84Q9/0IABA7Rz506NHTtW1dXVWr9+/W1v/+CDD2rYsGF+//6amhodPXpUTz/9tCRpzpw5qqio\n",

"UGlpaYfXAAAAXIHc+KvTfQ4cOKDHH39cYWFhcjqdHXrgZ555RpZlKTk5WT//+c81ePBgVVRUaOjQ\n",

"oXK5bo7lcDgUFRWl8vJyhYeHd2gtJibmlsduaGhQQ0NDq+u8Xm+HngcAAOj+AjrCM2TIEP3oRz/S\n",

"li1b9PDDD6upqalDoVBQUKDi4mIdO3ZMgwYN0rPPPhvw77gTWVlZCg8Pb3UpLCzs1BkAAEDnCSh4\n",

"3n33Xd1///167733NGDAAJ0/f16ZmZkBP2hUVJSkmyc7L1u2TAcOHJAkDR8+XFVVVWpubpZ084hS\n",

"eXm5oqKiOrzWlhUrVqiurq7VJTk5OeDnAQAA7g4BBc+gQYO0bNkypaSkSLr5bqtATw6+fv26Ll++\n",

"7Pt548aNGjt2rCQpIiJC48aNU15eniQpPz9fw4YNU0xMTIfX2uJ2uxUWFtbq0tGX5gAAQPfn1+fw\n",

"jBw5Ug6H47brZ8+ebfP6RYsWafv27aqurtbAgQPVv39//dd//ZfmzJkjr9cry7I0atQo5eTkKDo6\n",

"WpJUUlKi9PR01dbWKiwsTLm5ub63xXd0zR98Dg8AAObyK3i++kyb9957T2VlZVq0aJEk6Ve/+pVG\n",

"jBihVatW2TtlJyB4AAAwl1/v0nrggQckSTt37tSRI0d813/nO99RcnKyEcEDAADMFdA5PHV1dbp+\n",

"/brv5+vXr6uuri7oQwEAAARTQJ/Ds2DBAqWkpOjJJ5+UJG3ZssX3YX8AAADdVUDB89prrykpKUl7\n",

"9uyRJK1Zs0aPPvqoLYMBAAAES0DBI0mPPfaYHnvsMTtmAQAAsEVAwVNWVqY1a9bozJkzvg/5k+Q7\n",

"4gMAANAdBRQ8Tz75pB566CEtWbKED+oDAAB3jYCCp76+XllZWXbNAgAAYIuA3pYeFxen8vJyu2YB\n",

"AACwRUBHeC5evKjExESlpqYqNDTUd/3WrVuDPhgAAECwBBQ8Tz/9NJ+7AwAA7joBBc+zzz5r1xwA\n",

"AAC2CSh4/vqv/7rN63/9618HZRgAAAA7BBQ848eP9/1zfX298vPzNW7cuKAPBQAAEEwBBc9LL73U\n",

"6ucf/ehHeuKJJ4I6EAAAQLAF9Lb0PxcaGqrKyspgzQIAAGCLgI7wZGZm+v7Z6/Xq6NGjiouLC/pQ\n",

"AAAAwRRQ8ISHh///O7pcWrp0qWbPnh30oQAAAIIpoOBZuXKlXXMAAADYJqBzeK5evaqXXnpJsbGx\n",

"io2N1ZIlS3T16lW7ZgMAAAiKgILnxRdfVHNzszZv3qwtW7aopaVFL774ol2zAQAABEVAL2kVFxfr\n",

"+PHjvp/feustJSYmBn0oAACAYAroCI/X6231Eta1a9fk9XqDPhQAAEAwBfxdWikpKZo/f74kafPm\n",

"zXruuedsGQwAACBYAgqev/3bv1V8fLx2794tSVq7dq3S0tJsGQwAACBY/Aqeuro6/cM//INKSko0\n",

"fvx4/exnP5Pb7bZ7NgAAgKDw6xyexYsX6+zZs3r00Ud16NAh/d3f/Z3dcwEAAASNX0d4iouL9ckn\n",

"n8jhcCg9PV3f/e537Z4LAAAgaPw6wuN2u+VwOCRJ99xzj60DAQAABJtfR3gqKytbfXFoRUVFq5+z\n",

"s7ODPxkAAECQ+BU8L730Urs/AwAAdGd+BQ9fGgoAAO5mfp3Dc/jw4XbXb9y4oU8//TQoAwEAAASb\n",

"X8Hz+uuva/r06crNzdWnn36q2tpanT9/Xnv27NFPfvITpaam6sKFC3bPCgAA0CF+vaS1efNmHTly\n",

"RBs2bNDPfvYzVVZWqm/fvkpISNCcOXP0+9//Xn379rV7VgAAgA7x+6slkpKSlJSUZOcsAAAAtgjo\n",

"29JffPFFv64DAADoTgIKng8//PCW6w4dOhS0YQAAAOzg10tamzZt0nvvvadz585p9uzZvuvr6urU\n",

"r18/24YDAAAIBr+C5y/+4i80c+ZMHTt2TDNnzvRdHxYWpoceesi24QAAAILBr+BJTExUYmKiHnvs\n",

"MQ0ePNjumQAAAILK73dpSVJISIjWrFmjM2fOqLm52Xf9r3/966APBgAAECwBBc/cuXM1ePBgpaam\n",

"yul02jUTAABAUAUUPFVVVdq9e7ddswAAANgioLelf+tb39Lly5dtGgUAAMAefh3hyczMlCT16dNH\n",

"48aNU1pamkJDQ33r2dnZ9kwHAAAQBH4FT3h4uO8///Iv/9LWgQAAAILNr+BZuXKl3XMAAADYJqCT\n",

"lletWnXLdQMGDFBqaipfLAoAALqtgE5a/uMf/6hf/vKXqqioUGVlpdavX699+/bpBz/4gX7xi1/Y\n",

"NSMAAMAdCegIzxdffKGioiJFRkZKki5cuKCFCxfqww8/1KRJk7R06VJbhgQAALgTAR3hqays9MWO\n",

"JEVGRurzzz/XN7/5TYWEhAR9OAAAgGAIKHjuu+8+/f3f/70qKipUUVGhVatW6d5775XX65XD4bBr\n",

"RgAAgDsSUPD867/+q06cOCGPxyOPx6NPPvlEb7/9tpqamvSb3/zGrhkBAADuSEDn8AwZMkSbN29u\n",

"cy0+Pj4oAwEAAASbX8Gzf/9+TZ48Wb/73e/aXH/iiSeCOhQAAEAw+RU8eXl5mjx5statW3fLmsPh\n",

"IHgAAEC35lfw/OpXv5Ik7d2719ZhAAAA7BDQScvNzc16/fXX9eKLL0qSzpw5oz179tz29kuXLlV0\n",

"dLQcDoeKiop8158+fVoTJ05UbGyskpKSdOLECVvXAABAzxZQ8CxZskQnT570HekZOHCgfvKTn9z2\n",

"9nPnztXBgwc1YsSIVtcvWrRIGRkZOnXqlF555RWlp6fbugYAAHo2h2VZlr839ng8Kioq0tixY/XR\n",

"Rx9JkhITE3X8+PF27xcdHa1t27bJ4/GopqZGMTExunTpklwulyzL0tChQ3Xw4EGFhYUFfS0mJsav\n",

"55aZmans7Gx/twIAANxFAnpbemhoaKufvV6vWlpaAnrAiooKDR06VC7XzYd2OByKiopSeXm5wsPD\n",

"g77WVvA0NDSooaHhlucCAADMFNBLWgkJCcrLy1NLS4tKS0u1ePFiTZkyxabR7JOVlaXw8PBWl8LC\n",

"wq4eCwAA2MSv4Fm5cqUKCgq0bt06HThwQNXV1frOd74jh8Ohn//85wE94PDhw1VVVaXm5mZJkmVZ\n",

"Ki8vV1RUlC1rbVmxYoXq6upaXZKTkwN6HgAA4O7hV/DU1NQoIyNDEREROnPmjJYuXapt27bpl7/8\n",

"pfr27RvQA0ZERGjcuHHKy8uTJOXn52vYsGGKiYmxZa0tbrdbYWFhrS5OpzOg5wEAAO4eAZ20XFVV\n",

"pX379vkuVVVVmjRpkrZv397m7RctWqTt27erurpaAwcOVP/+/VVaWqqSkhKlp6ertrZWYWFhys3N\n",

"9X01hR1r/uCkZQAAzBVQ8EhSY2OjDh06pL1792rjxo26fv26zp8/b9d8nYbgAQDAXH69S6ugoED7\n",

"9u3T3r17df78eaWkpOjBBx/U9u3bNXr0aLtnBAAAuCN+Bc+UKVOUkpKiV199VWlpaXbPBAAAEFR+\n",

"nbRcUFCgGTNmaO3atYqJidGCBQv0T//0Tzp16pTd8wEAANyxDp3Dc/jwYe3du1e//e1vde3aNVVW\n",

"Vto1X6fhHB4AAMwV0Cctf/7559q7d6/27dunPXv2qKamRt/97nftmg0AACAo/AqeH/7wh9q/f78+\n",

"//xzpaamaurUqcrLy1NSUpLv6xwAAAC6K79qZfjw4fqXf/kXpaSkKCQkxO6ZAAAAgsqv4Hn11Vft\n",

"ngMAAMA2AX15KAAAwN2I4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIH\n",

"AAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4\n",

"AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyC\n",

"BwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYj\n",

"eAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8\n",

"ggcAABiP4AEAAMYjeAAAgPG6LHiio6N1//33y+PxyOPxaNOmTZKk06dPa+LEiYqNjVVSUpJOnDjh\n",

"u09H1wAAQM/WpUd4Nm3apKKiIhUVFWn+/PmSpEWLFikjI0OnTp3SK6+8ovT0dN/tO7oGAAB6Nodl\n",

"WVZXPHB0dLS2bdsmj8fju66mpkYxMTG6dOmSXC6XLMvS0KFDdfDgQYWFhXVoLSYm5pbHbmhoUEND\n",

"Q6vrfvrTnyonJ8fupw0AALpAlx7heeaZZxQfH6/nn39eFy9eVEVFhYYOHSqXyyVJcjgcioqKUnl5\n",

"eYfX2pKVlaXw8PBWl8LCws550gAAoNN1WfAUFBSouLhYx44d06BBg/Tss8922mOvWLFCdXV1rS7J\n",

"ycmd9vgAAKBzubrqgaOioiRJISEhWrZsmWJjYzV8+HBVVVWpubnZ99JUeXm5oqKiFBYW1qG1trjd\n",

"brnd7lbXOZ1O258zAADoGl1yhOf69eu6fPmy7+eNGzdq7NixioiI0Lhx45SXlydJys/P17BhwxQT\n",

"E9PhNQAAgC45afns2bOaM2eOvF6vLMvSqFGjlJOTo+joaJWUlCg9PV21tbUKCwtTbm6u4uPjJanD\n",

"a/7IzMxUdna2Lc8XAAB0rS57l1Z3Q/AAAGAuPmkZAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP\n",

"4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDx\n",

"CB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8QgeAABgPIIHAAAY\n",

"j+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA\n",

"8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAA\n",

"GI/gAQAAxiN4AACA8QgeAABgPIIHAAAYj+ABAADGI3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeDpB\n",

"3ZeNOnXhquq+bOzqUQAA6JFcXT2AyU5WXdGr//cTfVRxWd4WS85eDo2L+ob+z6w4xUb27+rxAADo\n",

"MTjCY5OTVVf0v976vQrLvlCT11KLJTV5LR0+d0kz3zyoUxeudvWIAAD0GASPTRa/c1Q3mlraXLvR\n",

"1KKX3j3WyRMBANBzGRU8p0+f1sSJExUbG6ukpCSdOHGiS+Y4c/Gqyi7daPc2p2uucU4PAACdxKjg\n",

"WbRokTIyMnTq1Cm98sorSk9P75I5cnaf8ut2xyu+sHkSAAAgGRQ8NTU1Onr0qJ5++mlJ0pw5c1RR\n",

"UaHS0tJbbtvQ0KArV660uni93qDMUd/kVeHZS37d9tKNpqA8JgAAaJ8xwVNRUaGhQ4fK5br5xjOH\n",

"w6GoqCiVl5ffctusrCyFh4e3uhQWFgZljmsNzerl8O+246MGBOUxAQBA+4wJnkCsWLFCdXV1rS7J\n",

"yclB+d393C71v8f9tbe7J8Sh4d/sF5THBAAA7TPmc3iGDx+uqqoqNTc3y+VyybIslZeXKyoq6pbb\n",

"ut1uud2to8TpdAZljtAQp9LiInW+7ktdq7/9y2Q5T40LyuMBAICvZ8wRnoiICI0bN055eXmSpPz8\n",

"fA0bNkwxMTGdPsvC1GjF3TtA/UJvjaheDmntvAQ9MmZIp88FAEBPZcwRHknasGGD0tPTtXr1aoWF\n",

"hSk3N7dL5hjUz603F4xV3gefaceJal39skFy9NIjD0RoybRYDer39S95AQCA4HFYlmV19RDdQWZm\n",

"prKzs4P+e+ubvLrW0Kx+bpdCQ4LzshkAAAiMUUd4uqPQECehAwBAFzPmHB4AAIDbIXgAAIDxCB4A\n",

"AGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxiN4AACA8fgurf8xe/ZsRUdHB/33\n",

"er1eFRYWKjk5WU4nXzFhF/a5c7DPnYN97jzsdeewc59HjBihv/mbv/na2xE8Nrty5YrCw8NVV1en\n",

"sLCwrh7HWOxz52CfOwf73HnY687RHfaZl7QAAIDxCB4AAGA8ggcAABiP4LGZ2+3WypUr5Xa7u3oU\n",

"o7HPnYN97hzsc+dhrztHd9hnTloGAADG4wgPAAAwHsEDAACMR/AAAADjETw2On36tCZOnKjY2Fgl\n",

"JSXpxIkTXT3SXSU6Olr333+/PB6PPB6PNm3aJKn9fe3oWk+ydOlSRUdHy+FwqKioyHe9Hfvak/f8\n",

"dvt8u79riX3uiPr6es2aNUuxsbFKTEzU9OnTVVpaKkmqqalRWlqaRo8erbi4OBUUFPjuZ8eaydrb\n",

"5ylTpmjkyJG+v+l169b57tet9tmCbaZOnWrl5uZalmVZW7ZssSZMmNC1A91lRowYYX300Ue3XN/e\n",

"vnZ0rSfZv3+/VVFRccv+2rGvPXnPb7fPt/u7tiz2uSNu3Lhhbd++3WppabEsy7LeeOMNa/LkyZZl\n",

"WdZzzz1nrVy50rIsyyosLLTuu+8+q7Gx0bY1k7W3z5MnT7b+7d/+rc37dad9JnhscuHCBat///5W\n",

"U1OTZVmW1dLSYkVGRlqnT5/u4snuHm39H0N7+9rRtZ7qT/fXjn1lz2/yN3jY5+A4cuSINWLECMuy\n",

"LKtv375WVVWVby0pKcnatWuXbWs9yZ/uc3vB0532mZe0bFJRUaGhQ4fK5XJJkhwOh6KiolReXt7F\n",

"k91dnnnmGcXHx+v555/XxYsX293Xjq6h/b9X9jz4/vzvWrLn30FPlJOTo5kzZ6q2tlZNTU0aMmSI\n",

"by06Olrl5eW2rPU0X+3zV5YvX674+HjNnz9fZ8+elaRut88ED7qtgoICFRcX69ixYxo0aJCeffbZ\n",

"rh4JuGP8Xdtn9erVKi0tVVZWVlePYrQ/3+d33nlHJ0+eVHFxsSZNmqTHH3+8iydsG8Fjk+HDh6uq\n",

"qkrNzc2SJMuyVF5erqioqC6e7O7x1V6FhIRo2bJlOnDgQLv72tE1tP/3yp4HV1t/15I9/w56krVr\n",

"12rr1q3asWOH+vTpo4EDB8rlcqm6utp3m7KyMkVFRdmy1lP8+T5LN/92pZtHF5csWaKzZ8+qtra2\n",

"2+0zwWOTiIgIjRs3Tnl5eZKk/Px8DRs2TDExMV082d3h+vXrunz5su/njRs3auzYse3ua0fX0P7f\n",

"K3sePLf7u5bs+XfQU2RnZ2vjxo3atWuXBgwY4Lt+3rx5Wr9+vSTpyJEjOn/+vCZPnmzbmuna2ufm\n",

"5mZduHDBd5v8/HxFRkZq4MCBkrrZPt/RGUBo18mTJ62UlBRr9OjR1vjx463i4uKuHumucebMGcvj\n",

"8Vjx8fFWXFyc9cQTT1jnzp2zLKv9fe3oWk+SkZFh3XfffZbT6bQiIiKsb33rW5Zl2bOvPXnP29rn\n",

"9v6uLYt97oiKigpLkjVq1CgrMTHRSkxMtJKTky3Lsqzq6mpr+vTpVkxMjDVmzBhrz549vvvZsWay\n",

"2+3ztWvXrPHjx1txcXFWQkKCNW3aNKuoqMh3v+60z3yXFgAAMB4vaQEAAOMRPAAAwHgEDwAAMB7B\n",

"A+CORUdHt/q+KOnm9+ts27at3fu98MIL2rt379f+/tdee03Lli1rc62oqEjvvffeLdfPmzdPH3zw\n",

"wdfe3x9lZWWt3v1zp4qLi/Xoo48G7fcB+HoED4Au88///M+aOnXqHf2OtoKnsLBQly5dUmpq6h39\n",

"brskJCTI7XZrz549XT0K0GMQPABsdfXqVf3whz9UcnKyEhISlJGRocbGRkmtjwJVVVXpkUce0Zgx\n",

"Y/TII4/o+9//vl577TXf76mqqtL3vvc9jRkzRtOmTdOlS5dUU1OjV199VXv37pXH49HixYslSRs2\n",

"bNCCBQvanOftt9/Www8/rKeeekrx8fGaMGGC76PwJSk3N1cej0eJiYmaMGGCysrKfGsrV67U+PHj\n",

"FRMTo//4j//wXX/kyBFNmzZNEyZM0NixY7VlyxZJ0sWLF/XII48oPj5eCQkJeu6553z3eeqpp7Rh\n",

"w4Y72lsA/iN4AATF/Pnz5fF4fJejR49Kkl5++WVNmjRJhYWFOn78uFpaWpSTk3PL/ZcuXarU1FR9\n",

"+umn+s1vfqN9+/a1Wj98+LDefvttffrpp4qIiNCGDRsUERGhVatWaerUqSoqKvJ9UNm+ffv07W9/\n",

"+7azHjlyRKtXr9bHH3+shx9+WGvWrPHdb9WqVdqxY4eOHz+ugoICRURESJLq6uqUkJCgP/zhD3rz\n",

"zTf14x//WJJ0+fJlZWRk6N1339XRo0e1a9cuvfzyyzp//rzy8vI0cuRIffzxxyouLtbrr7/umyE1\n",

"NVXvv/9+xzccQEBcXT0AADNs2rRJHo/H9/OUKVMkSdu2bdMHH3yg7OxsSdKNGzfkdDpvuf/777+v\n",

"tWvXSpKGDBlyy/fxpKWl+T69NTU1VR9//PFtZ6msrFRkZORt11NTUzVy5EjfP7/xxhuSpO3bt2vh\n",

"woUaOnSoJPk+Ol+SQkNDNXv2bN99zpw5I0k6dOiQzp49e8s5OSUlJUpJSdG6dev08ssv68EHH1Ra\n",

"WppvfciQIaqtrVV9fb1CQ0NvOyuA4CB4ANjKsizl5+crNjY2oPs5HI5WP/9pFDidTt93R7WlT58+\n",

"qq+vv+16IL/rK2632zeT0+mU1+uVdPP5PfDAAzp06FCb9ysqKtLu3bu1detW/fSnP9VHH30kp9Op\n",

"+vp6OZ1O9e7d+2sfG8Cd4yUtALaaNWuW1qxZ44uKL774QqWlpbfcbtq0aXr77bclSRcuXNC///u/\n",

"+/X7w8LCVFdX1+q6hIQElZSUBDzr9773PeXl5amqqkqS9OWXX+rLL79s9z4TJ07UuXPntHv3bt91\n",

"RUVFamxs1Llz59SvXz89+eSTeuONN3Tq1Cldu3ZNkvTHP/5RcXFx6tWL/xkGOgP/TQNgq3Xr1ume\n",

"e+6Rx+NRQkKCHnrooVYnAn8lJydHBw4c0JgxY/SDH/xA3/72t/16K/hDDz2khoYGJSQk+E5anjt3\n",

"rv7zP/8z4FkffPBBrVy5Un/1V3+lxMRETZ48WRcvXmz3Pt/4xje0fft2rV69WomJiRozZoyWL1+u\n",

"lpYW7du3T+PHj5fH49HEiRP1j//4jwoPD5ck7dy5U3Pnzg14RgAdw3dpAegWbty4oZCQELlcLtXW\n",

"1iolJUV5eXntnnx8O9euXdPEiRP1wQcfqG/fvjZMe2caGxs1YcIE7dmzR4MGDerqcYAegeAB0C0U\n",

"FxfrmWeekWVZamxsVEZGhu+dUB3x/vvvKzIyUnFxcUGcMjhKSkp05swZzZgxo6tHAXoMggcAABiP\n",

"c3gAAIDxCB4AAGA8ggcAABiP4AEAAMYjeAAAgPEIHgAAYDyCBwAAGI/gAQAAxvt/k1pCMtxgILcA\n",

"AAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-e87d3be0-551a-4c83-890a-488246fc4087\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-e87d3be0-551a-4c83-890a-488246fc4087\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x7867104cdcf0>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">Values</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_27['Index'].plot(kind='line', figsize=(8, 4), title='Index')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-3b302021-1cd0-4906-855c-1605307c1064\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAABTh0lEQVR4nO3dd3RUdf7/8eedVAJJgIROQoAQOgklAYIoqKgUlY6oSEAEASu6\n",

"ImvZVVfRVUEsFEVBQZpSFBUVG733TkKA0ENNQkid+fz+yG5+y3fVpSS5k+T1OGfOIXNnMq97nUle\n",

"3tz7vpYxxiAiIiIi4qYcdgcQEREREfkzKqwiIiIi4tZUWEVERETEramwioiIiIhbU2EVEREREbem\n",

"wioiIiIibk2FVURERETcmgqriIiIiLg1FVYRERERcWsqrCIixcT9999PXFyc3TFERIqcCquISBHp\n",

"0KEDzz//vN0xRESKHRVWEREREXFrKqwiIjYICwvj5ZdfpkuXLvj7+1O3bl0WLlx42WPefPNNQkND\n",

"KV++PEOGDCE7O/uy5RcuXGD48OHUqlWLoKAgunTpQmJiIgB79uwhICCAr776Kv/xw4cPp1WrVmRl\n",

"ZRX+CoqIFCAVVhERm0ydOpV//OMfpKSkMHLkSAYOHEhqaioAs2bN4rXXXmPOnDmcPn2amJiYywqt\n",

"MYYePXqQmprKli1bOH78OE2bNqVbt27k5OTQsGFDPv74YwYOHEhCQgIzZsxg3rx5fPnll/j4+Ni1\n",

"yiIi10SFVUTEJkOGDKFFixY4HA6GDRtGWloae/bsAWDatGkMHjyY2NhYvLy8GDp0KM2aNct/7pYt\n",

"W1i1ahVTpkyhYsWK+Pj48Nprr3Hw4EHWrVsHQJ8+fXjwwQfp1q0bI0aMYObMmYSFhdmxqiIi10WF\n",

"VUTEJtWrV8//d9myZQFIS0sD4OjRo9SuXfuyx//n1/Hx8eTm5lKzZk3Kly9P+fLlCQoKAuDIkSP5\n",

"j3v88cdJSEigadOmdO7cudDWRUSkMKmwioi4oZo1a3Lo0KHL7vvPr6tWrYq3tzenT5/mwoUL+beM\n",

"jAz69+8PQE5ODv3796dXr14cOnSI999/vwjXQESk4Kiwioi4oYEDB/LJJ5+wdu1acnNzmTp1Ktu2\n",

"bctffsMNN9CkSROGDx9OcnIyAOfPn2f+/PlcunQJgKeffpqMjAw+/fRT5s6dy+jRo/MPFxARKU5U\n",

"WEVE3NB9993HM888Q58+fQgODmbt2rX06NEjf7mHhwdLly7Fz8+P1q1b4+/vT2RkJAsXLsSyLObM\n",

"mcPMmTOZP38+vr6+tG/fnpdffpnevXtz+vRpG9dMROTqWcYYY3cIEREREZE/oj2sIiIiIuLWVFhF\n",

"RERExK2psIqIiIiIW1NhFRERERG3psIqIiIiIm5NhVVERERE3JoKq4iIiIi4tRJdWCdMmGB3BBER\n",

"ERG5TiW6sB4+fNjuCCIiIiJynUp0YRURERGR4k+FVURERETcmgqriIiIiLg1FVYRERERcWsqrCIi\n",

"IiLi1lRYRURERMStqbCKiIiIiFtTYRURERERt3ZVhTUzM5Pu3bsTERFBZGQknTp1IiEhAYAOHTpQ\n",

"u3ZtoqKiiIqKYvz48fnPS05O5o477qBevXo0adKE5cuXX/cyERERESkdPK/2CUOHDqVz585YlsX7\n",

"77/PkCFD+O233wAYP3483bt3/6/nPPvss7Rp04bvv/+eDRs20KNHDw4ePIiXl9c1LxMRERGR0uGq\n",

"9rD6+vrSpUsXLMsCoE2bNhw6dOh/Pm/evHk8/PDDAERHR1O9enWWLVt2XcvcUVau0+4IIiIiItcs\n",

"I9s9u8x1HcM6YcIE7r777vyvn332WZo2bUq/fv1ITEwE4OzZs+Tk5FC1atX8x4WFhZGUlHTNy35P\n",

"VlYWqampl92czqLZ6GcuZvHUvG30/3AtLpcpktcUERERKUgJyWl0Gr+MLzYesTvKf7nmwvraa6+R\n",

"kJDA2LFjAZgxYwZ79+5l+/bttG/fnm7duhVYyCsxduxYAgMDL7utX7++SF7b6TIs2XmCzUkX+Grb\n",

"sSJ5TREREZGCsubAWXpOXM3R8xlMWZ5IjtNld6TLXFNhfeutt1iwYAFLlizBz88PgJCQEAAsy+KR\n",

"Rx4hMTGRs2fPEhQUhKenJydPnsx//qFDhwgNDb3mZb9nzJgxpKSkXHaLiYm5ltW7alUCfBnZMRyA\n",

"N5bs41J2bpG8roiIiMj1WrjlKA98so7UzFxa1qrAvGFt8fJwr0FSV51m3LhxzJ49m6VLl1K+fHkA\n",

"cnNzOXXqVP5j5s+fT5UqVQgKCgKgT58+TJ48GYANGzZw7Ngxbrrpputa9n/5+PgQEBBw2c3Dw+Nq\n",

"V++aPXhDbUIqluFkaiaTfztQZK8rIiIici2MMbz3czxPzt1GjtPQtWk1Ph/Smoplve2O9l+uakrA\n",

"0aNHeeqpp6hTpw4dO3YE8oriL7/8QteuXcnKysLhcBAcHMzXX3+d/7w33niDAQMGUK9ePby9vZk5\n",

"c2b+mf7Xuszd+Hp58NfODRn++WamLE+kb3QINSv42R1LRERE5L/kOF08t3AH8zYeBWDYjXUYfUcD\n",

"HA7L5mS/zzLGlNizhEaNGsW4ceOK7PWMMdzz4VrWHTxH12bV+ODeFkX22iIiIiJXIjUzh5Gfb2ZF\n",

"/BkcFrx0dxMGtKlld6w/5V4HKBRzlmXx4p2NsCz4dvsJ1h88Z3ckERERkXzHL2TQd/IaVsSfwc/b\n",

"g6kDW7l9WQUV1gLXuHog90TnnRj20uJdODXmSkRERNzAruMp9Ji4ir0n06jk78O8YW25uUEVu2Nd\n",

"ERXWQvDUbRH4+3iy63gqX25yv1lmIiIiUrr8ui+ZvpPXcCo1i4gq5Vg0sh1NagTaHeuKqbAWguBy\n",

"Pjx2Sz0A3vxhH2mZOTYnEhERkdJq1rokhny6kfRsJ+3Cg/hyeCw1ypexO9ZVUWEtJANjw6gdXJYz\n",

"F7N5/9cEu+OIiIhIKeNyGV5fspe/LtyB02Xo3bIm0+JiCPB1z4lLf0aFtZB4ezp4vmtDAKatPMSh\n",

"M+k2JxIREZHSIjPHyWNztjB5Wd5s+CdvjeDN3s3w9iye1a94pi4mbm5Qmfb1gsl2unj1uz12xxER\n",

"EZFS4Hx6NgM+Xsc320/g5WHxdp9IHr+1HpblnjNWr4QKayGyLIsXuzXCw2GxdPcpViWcsTuSiIiI\n",

"lGCHz6bTc9JqNhw6j7+vJ58OiqFXy5p2x7puKqyFrF4Vf+5vnTfm6uXFu8l1umxOJCIiIiXR5qTz\n",

"9Ji4moNn0qlRvgzzh8cSGx5sd6wCocJaBJ7sFEF5Py/2nUpj9gaNuRIREZGCtWTHCfp/uJZz6dk0\n",

"rRHIwpGxRFTxtztWgVFhLQLl/bx58tYIAMb9uI+USxpzJSIiItfPGMPUFYmMmLWZrFwXtzSozJyh\n",

"bajs72t3tAKlwlpE7msdSr3K5Th/KYd3ft5vdxwREREp5pwuw9+/3sU/vt2DMfBA21p8+EAryvp4\n",

"2h2twKmwFhFPDwcvdGsEwIw1h0lIvmhzIhERESmuLmXnMmzGRj5dcxjLgue7NuSluxrj4Si+kwD+\n",

"jAprEboxohK3NqxMrsvwj2932x1HREREiqHktEzu+XAtP+1JxsfTwcR7WzCkfZ1iPbbqf1FhLWLP\n",

"dW2El4fFb/tO8+veZLvjiIiISDESfyqNHh+sZvvRFCqW9WbWQ23o3LSa3bEKnQprEasdXJa42DAA\n",

"Xvl2NzkacyUiIiJXYPWBM/SctJpjFzKoHVyWBcNjaVmrgt2xioQKqw0evaUeQWW9STydzmdrDtsd\n",

"R0RERNzcgs1HGfjJetIyc2lVqwILhscSFlzW7lhFRoXVBgG+Xjx1W30AJvy0n3Pp2TYnEhEREXdk\n",

"jOHdn+MZNW8bOU5D12bVmDmkNRXKetsdrUipsNqkX3QIDasFkJqZy7il++yOIyIiIm4mx+nimS+3\n",

"M25p3jjMYTfV4b17muPr5WFzsqKnwmoTD4fF3+7MG3M1a10Se06k2pxIRERE3EVqZg6Dpm3gi01H\n",

"cVjwj+5NGNO5IY4SOrbqf1FhtVGbOkF0blIVl4FXvtmNMcbuSCIiImKzYxcy6DNpDSsTzuDn7cHH\n",

"A6O5v00tu2PZSoXVZn/t0hBvTwerD5zlx92n7I4jIiIiNtp5LIUeH6xi36k0Kvv7MG9YWzo2qGx3\n",

"LNupsNospKIfD7WvDcCr3+4hK9dpcyIRERGxw697k+k7ZQ3JaVnUr+LPwpHtaFIj0O5YbkGF1Q2M\n",

"6BBOZX8fks5d4pOVh+yOIyIiIkVs5trDPPjpBi5lO7khPJgvhrelRvkydsdyGyqsbqCsjyfP3NEA\n",

"gPd/iSc5LdPmRCIiIlIUXC7D2CV7eH7RTlwGeresybRB0QT4etkdza2osLqJns1rEFkzkPRsJ2/9\n",

"oDFXIiIiJV1mjpNH52xhyrJEAEZ1iuDN3s3w8lA9+7+0RdyEw2Hx4p2NAfhi01F2HE2xOZGIiIgU\n",

"lnPp2dw/dR3fbj+Bl4fF+H6RPHZLPSyrdI6t+l9UWN1Iy1oVuDuqOsbAS4t3acyViIhICXToTDq9\n",

"Jq1m4+Hz+Pt68ungGHo0r2l3LLemwupmRt/RAF8vBxsPn+eb7SfsjiMiIiIFaNPh8/SctJqDZ9Kp\n",

"Ub4MC4bHEls32O5Ybk+F1c1UL1+Gh2+qC8DrS/aSmaMxVyIiIiXBdztO0P+jtZxLz6ZZzUAWjoyl\n",

"XhV/u2MVCyqsbmjYjXWpHujLsQsZfLg80e44IiIich2MMXy0PJGRszaTnevi1oaVmTO0DZX9fe2O\n",

"VmyosLqhMt4ePNulIQCTfjvAiZQMmxOJiIjItch1unjxq128+t0ejIGBbWsxZUAr/Lw97Y5WrKiw\n",

"uqk7m1WjVa0KZOQ4eWPJXrvjiIiIyFVKz8pl2IxNzFh7GMuC57s25O93NcbDoUkAV0uF1U1ZlsWL\n",

"dzYCYNHW42xOOm9zIhEREblSyamZ9PtwDT/vTcbH08Gk+1owpH0dja26RiqsbqxZzfL0bpk35uKl\n",

"xbtxuTTmSkRExN3tP5VGj4mr2XkslYplvZk9tA13NKlmd6xiTYXVzT1ze33Kenuw7cgFFm45Zncc\n",

"ERER+ROrE87Qa9Jqjl3IoE5wWRaOiKVFaAW7YxV7KqxurnKALyNvDgfgje/3kp6Va3MiERER+T3z\n",

"Nx1l4LT1pGXmEh1WgfnDY6kVVNbuWCWCCmsxMLhdbUIqliE5LYtJvx2wO46IiIj8B2MM7/y0n6e+\n",

"2EaO03BnZHVmPNiaCmW97Y5WYqiwFgO+Xh48968xVx+uSOTIuUs2JxIRERGA7FwXT3+xnXd+igdg\n",

"eIe6TOgXha+Xh83JShYV1mLi9sZVaVsniOxcF69rzJWIiIjtUjJyiJu2nvmbj+LhsHitR1NG39EA\n",

"h8ZWFTgV1mLi32OuHBZ8u+MEaxPP2h1JRESk1Dp2IYM+k1ez+sBZynp7MHVgK+5tHWp3rBJLhbUY\n",

"aVgtgHti8j4MLy/ejVNjrkRERIrczmMpdP9gFftPXaRKgA/zHm5Lx/qV7Y5VoqmwFjNPdYrA39eT\n",

"3SdS+WLjEbvjiIiIlCq/7D1F3ylrOJ2WRYOq/iwc0Y7G1QPtjlXiqbAWM0HlfHj8lnoAvPXjPlIz\n",

"c2xOJCIiUjrMWHuYIZ9u5FK2k/b1gvni4bZUL1/G7lilggprMfRA2zDqBJflzMVs3v8lwe44IiIi\n",

"JZrLZXjtuz28sGgnLgN9W9Xkk7ho/H297I5WaqiwFkPeng6e75Y35mraqoMcPJNucyIREZGSKTPH\n",

"yaOzt/Dh8kQg79C8N3o1w8tDFaooaWsXUx3rV+bGiErkOA2vfrvH7jgiIiIlzrn0bO6buo5vd5zA\n",

"y8NifL9IHr2lHpalsVVF7aoKa2ZmJt27dyciIoLIyEg6depEQkLen6STk5O54447qFevHk2aNGH5\n",

"8uX5zyuMZaWdZVm82K0hHg6Ln/acYkX8absjiYiIlBgHz6TTc+IqNh0+T4CvJ58Nbk2P5jXtjlVq\n",

"XfUe1qFDh7Jv3z62bdvG3XffzZAhQwB49tlnadOmDfHx8UybNo17772XnJycQlsmEF7ZnwFtagHw\n",

"yje7yXW6bE4kIiJS/G06fI6eE1dx6OwlalYow4IRsbStG2R3rFLtqgqrr68vXbp0yd8V3qZNGw4d\n",

"OgTAvHnzePjhhwGIjo6mevXqLFu2rNCWSZ4nbq1HeT8v9p+6yKz1SXbHERERKda+3X6C/h+t4/yl\n",

"HJrVDGThiHaEV/a3O1apd13HsE6YMIG7776bs2fPkpOTQ9WqVfOXhYWFkZSUVCjLfk9WVhapqamX\n",

"3ZxO5/WsXrFQ3s+bUZ0iABi3dD8XLmXbnEhERKT4McYwZdkBRs7aTHaui06NqjBnaBsq+fvYHU24\n",

"jsL62muvkZCQwNixYwsyzzUbO3YsgYGBl93Wr19vd6wicW9MKBFVynHhUg7v/BRvdxwREZFiJdfp\n",

"4oWvdjJ2yV4A4mLDmHx/S/y8PW1OJv92TYX1rbfeYsGCBSxZsgQ/Pz+CgoLw9PTk5MmT+Y85dOgQ\n",

"oaGhhbLs94wZM4aUlJTLbjExMdeyesWOp4eDF7s1BvKGGsefSrM5kYiISPGQnpXL0BmbmLk2CcuC\n",

"F7o14u93NcbDoUkA7uSqC+u4ceOYPXs2S5cupXz58vn39+nTh8mTJwOwYcMGjh07xk033VRoy/4v\n",

"Hx8fAgICLrt5eHhc7eoVWzfUC+bWhlVwugyvfLsHY4zdkURERNzaqdRM+k5Zwy97k/HxdDDpvpY8\n",

"eENtu2PJ77DMVTSbo0ePEhISQp06dfD3zzsA2cfHh3Xr1nHq1CkGDBjAwYMH8fb25v3336djx44A\n",

"hbLsSowaNYpx48Zd8eOLu4Nn0rlt/DJynIZP4lpxc4MqdkcSERFxS/tOpjFo2nqOp2QSVNabqQNb\n",

"0Ty0gt2x5A9cVWEtbkpbYQV47bs9fLg8kTrBZfn+iRvx9tS1IURERP7TqoQzPDxjE2lZudSpVJbp\n",

"cTGEBvnZHUv+hNpMCfPIzeEEl/Mm8Uw6n605ZHccERERt/LlpqMM/GQ9aVm5xIRVZMHwWJXVYkCF\n",

"tYQJ8PXi6dvqAzDh53jOXsyyOZGIiIj9jDGMX7qfp7/YRq7LcFdkdWYMiaG8n7fd0eQKqLCWQH1a\n",

"hdCoWgBpmbm8vXS/3XFERERslZ3r4qkvtjHh57zRjyM71uWdflH4eJaek7OLOxXWEsjDYfG3OxsB\n",

"MGd9EntOpNqcSERExB4pGTkM/GQ9CzYfw8NhMbZnU/5yewMcGltVrKiwllCt6wTRtWk1XAZeXrxb\n",

"Y65ERKTUOXr+Er0nrWZN4lnKenvwSVw0/WN+f567uDcV1hLs2c4N8PZ0sCbxLD/sOvm/nyAiIlJC\n",

"bD96gR4TVxOffJGqAb588XAsN0VUsjuWXCMV1hIspKIfQ9vXAeDV7/aQmeO0OZGIiEjh+3nPKfpN\n",

"WcvptCwaVPVn4chYGlUPsDuWXAcV1hJueIe6VPb34ci5DD5ZddDuOCIiIoVqxppDPPTZRjJynLSv\n",

"F8wXD7elWmAZu2PJdVJhLeHK+njybOcGAHzwSwLJqZk2JxIRESl4Lpfh1W9388JXu3AZuCc6hE/i\n",

"ovH39bI7mhQAFdZSoHtUDSJDypOe7eSfP+yzO46IiEiBysxxMnLWZj5akfeXxL/cXp+xPZvi5aGa\n",

"U1Lov2Qp4PiPMVdfbjrK9qMX7A0kIiJSQM5ezOLej9ayZOdJvD0cTLgnipEdw7Esja0qSVRYS4kW\n",

"oRXoHlUd0JgrEREpGQ6eSafnpNVsTrpAYBkvZjwYw91RNeyOJYVAhbUUGd25AWW8PNh4+DyLt5+w\n",

"O46IiMg123joHD0nruLw2UuEVCzD/OGxtK4TZHcsKSQqrKVItcAyDO9QF4Cx3+0hI1tjrkREpPj5\n",

"Zvtx7p26jvOXcogMKc+C4e0Ir1zO7lhSiFRYS5mhN9ahRvkynEjJZMryA3bHERERuWLGGCYvO8Aj\n",

"s7aQneuiU6MqzHmoDZX8feyOJoVMhbWU8fXyyB9zNXnZAY5fyLA5kYiIyP+W63Tx/KKdvL5kLwCD\n",

"2oUx+f6WlPH2sDmZFAUV1lKoW7NqRIdVIDPHxRvf77U7joiIyJ9Kz8rloc828vm6JCwLXuzWiL/d\n",

"2RgPhyYBlBYqrKWQZVm82K0xlgVfbT3OpsPn7I4kIiLyu06lZtJ3yhp+3XcaXy8Hk+9vyeAbatsd\n",

"S4qYCmsp1bRmIH1a1gTgpcW7cbk05kpERNzL3pOp9PhgFbuOpxJczps5Q9tye+OqdscSG6iwlmJP\n",

"316fcj6ebD+awoItx+yOIyIikm9l/Bn6TFrD8ZRM6lQqy4Lh7YgKKW93LLGJCmspVtnfl5EdwwH4\n",

"5/d7uZiVa3MiERERmLfxCHHT1pOWlUtM7YosGB5LaJCf3bHERiqspdzgG8KoFeRHcloWE39NsDuO\n",

"iIiUYsYYxv24j2e+3E6uy3B3VHVmPBhDeT9vu6OJzVRYSzkfTw/+2qUhAFNXHuTIuUs2JxIRkdIo\n",

"O9fFU/O28e4veTtPHukYzjv9ovDx1NgqUWEV4LZGVYitG0R2rovXvttjdxwRESllUi7l8MAn61iw\n",

"5RgeDovXezbl6dvrY1kaWyV5VFglb8zVnY1wWLBk50nWJp61O5KIiJQSR85dotfk1axNPEc5H0+m\n",

"xUVzT0yo3bHEzaiwCgANqgZwb+u8HxAvLd6NU2OuRESkkG0/eoEeE1eTkHyRqgG+zBvWlhsjKtkd\n",

"S9yQCqvkG9WpPgG+nuw5kcrcDUfsjiMiIiXYT7tP0W/KWs5czKJhtQAWjWxHo+oBdscSN6XCKvkq\n",

"lvXm8VsjAHj7x32kZubYnEhEREqiT1cfYuiMjWTkOLkxohLzhrWhaqCv3bHEjamwymUeaFuLOpXK\n",

"cjY9m/d+jrc7joiIlCAul+Ef3+zmb1/vwmWgf0wIHw9shb+vl93RxM2psMplvDwcvNCtEQDTVx8i\n",

"8fRFmxOJiEhJkJnjZOSszUxdeRCAZ+6oz2s9muLloSoi/5veJfJfOtavTIf6lchxGl79VmOuRETk\n",

"+py9mEX/j9ayZOdJvD0cTLgnihEdwjW2Sq6YCqv8rue7NsLTYfHz3mSW7z9tdxwRESmmEk9fpMfE\n",

"1WxJukBgGS9mPBjD3VE17I4lxYwKq/yu8MrlGNC2FgCvfLObXKfL5kQiIlLcbDh0jp6TVpN07hIh\n",

"FcuwYEQsresE2R1LiiEVVvlDT9wSQQU/L+KTL/L5uiS744iISDGyeNtx7vtoHRcu5RAZUp6FI9pR\n",

"t1I5u2NJMaXCKn8o0M+LUbfVB2Dc0v2cT8+2OZGIiLg7YwyTfjvAo7O3kO10cXvjKsx5qA3B5Xzs\n",

"jibFmAqr/Kn+0SHUr+JPSkYO7/y03+44IiLixnKdLp5btJM3vt8LwOB2tZl4X0vKeHvYnEyKOxVW\n",

"+VOeHg5evDNvzNXMdUnsP5VmcyIREXFHF7NyefDTjcxal4Rlwd/ubMSLdzbCw6FJAHL9VFjlf2oX\n",

"HkynRlVwugyvfLMbY4zdkURExI2cTMmk7+Q1LNt/Gl8vB1Pub8mgdrXtjiUliAqrXJHnujTE28PB\n",

"ivgz/Lwn2e44IiLiJvaeTKXHxFXsPpFKcDlv5g5ty22Nq9odS0oYFVa5ImHBZRl0QxgAr363h+xc\n",

"jbkSESntVsSfpvekNZxIyaRupbIsHNGOyJDydseSEkiFVa7YIx3DCS7nw8Ez6Xy6+pDdcURExEbz\n",

"Nhxh0LQNXMzKpXXtiiwY3o6Qin52x5ISSoVVrpi/rxd/uT0CgHd/jufMxSybE4mISFEzxvD2j/t4\n",

"Zv52cl2G7lHV+ezBGAL9vOyOJiWYCqtcld4tQ2hSI4C0rFze/nGf3XFERKQIZeU6eXLuVt77JQGA\n",

"R28OZ3y/KHw8NbZKCpcKq1wVD4fFi90aAzBnwxF2HU+xOZGIiBSFlEs5DPxkPYu2HsfTYfHPXs14\n",

"6rb6WJbGVknhU2GVqxZTuyJdm1XDGHh5scZciYiUdEfOXaLnpFWsTTxHOR9PPomLpm90iN2xpBRR\n",

"YZVrMqZzA3w8Haw7eI7vd560O46IiBSSbUcu0GPiKg6cTqdaoC9fDm/LjRGV7I4lpYwKq1yTmhX8\n",

"GHZjHSBvzFVmjtPmRCIiUtCW7j7FPR+u5czFbBpVC2DhiHY0qBpgdywpha6qsD722GOEhYVhWRZb\n",

"t27Nvz8sLIz69esTFRVFVFQUc+fOzV8WHx9PbGwsERERREdHs2vXruteJu7h4Q51qRrgy9HzGXy8\n",

"8qDdcUREpABNX3WQoTM2kpHj5KaISsx7uC1VA33tjiWl1FUV1t69e7Ny5Upq1ar1X8vmzp3L1q1b\n",

"2bp1K/369cu/f9iwYQwdOpT9+/czevRo4uLirnuZuAc/b09Gd64PwAe/JnAqNdPmRCIicr3+fRnu\n",

"vy/ejTHQPyaUjwe2opyPp93RpBS7qsJ64403UrNmzSt+fHJyMhs3buT+++8HoFevXhw5coSEhIRr\n",

"Xibu5e7IGkSFlOdStpN/fq8xVyIixVlGtpMRn2/K/6vZ6Dsa8FqPJnh66AhCsVeBvQMfeOABmjZt\n",

"yoMPPsjp06cBOHLkCNWqVcPTM+//yizLIjQ0lKSkpGte9keysrJITU297OZ06rjKwuZwWPztzkYA\n",

"zN98lG1HLtgbSERErsmZi1n0/2gtP+w6hbeHg3f7N2d4h7oaWyVuoUAK6/Lly9m+fTubN28mODiY\n",

"gQMHFsS3vSpjx44lMDDwstv69euLPEdp1Dy0Aj2b1wDgpcW7NOZKRKSYOXD6Ij0nrmbrkQuU9/Ni\n",

"5pDW3BVZ3e5YIvkKpLCGhoYC4OXlxRNPPMGKFSsACAkJ4cSJE+Tm5gJ5l3NLSkoiNDT0mpf9kTFj\n",

"xpCSknLZLSYmpiBWT67AM3c0oIyXB5uTLvD1tuN2xxERkSu0/uA5ek5cTdK5S4RW9GP+8Fhiale0\n",

"O5bIZa67sKanp3PhwoX8r2fPnk3z5s0BqFy5Mi1atGDmzJkAzJ8/n5o1axIeHn7Ny/6Ij48PAQEB\n",

"l908PHSpuKJSNdCXER3qAvD6kr1cys61OZGIiPwvX287zv1T15GSkUNUSHkWjIilbqVydscS+S+W\n",

"uYq/3w4bNoxvv/2WkydPEhQUhL+/Pz/++CO9evXC6XRijKFOnTpMmDCBsLAwAPbt20dcXBxnz54l\n",

"ICCAadOm0bRp0+tadqVGjRrFuHHjruo5cu0yc5zc8vYyjl3I4PFb6vFkpwi7I4mIyO8wxjBp2YH8\n",

"k2XvaFyVd+6JwtdLO3rEPV1VYS1uVFiL3rfbTzBy1mZ8PB388nQHapQvY3ckERH5D7lOFy98tZPZ\n",

"648AMOSG2ozp0hAPh06uEvelORVSoLo0rUpMWEWycl28vmSv3XFEROQ/XMzK5cFPNzJ7/REcFrx0\n",

"V2Oe79ZIZVXcngqrFCjLsnjxzkZYFizedpyNh87ZHUlERICTKZn0mbyGZftPU8bLgykDWjEwNszu\n",

"WCJXRIVVClyTGoH0bRkCwEuLd+NyldijTkREioU9J1Lp/sEq9pxIJbicD3OHtaFToyp2xxK5Yiqs\n",

"Uiievr0+5Xw82XEshS83H7U7johIqbV8/2n6TF7DydRMwiuXY+GIWJrVLG93LJGrosIqhaKSvw+P\n",

"3pw3huzNH/ZxMUtjrkREitrcDUkMmr6Bi1m5tKlTkfkPxxJS0c/uWCJXTYVVCk1cuzBqBflxOi2L\n",

"D35NsDuOiEipYYzhrR/2MXr+DpwuQ4/mNfh0cAyBfl52RxO5JiqsUmh8PD14rktDAD5ecZCks5ds\n",

"TiQiUvJl5Tp5Yu5W3v/XjoLHbg5nXN9IfDw1Y1WKLxVWKVSdGlXhhvBgsp0uXv1ut91xRERKtJRL\n",

"OTzw8Xq+2nocT4fFP3s3Y9Rt9bEsja2S4k2FVQqVZVm80K0RDgt+2HWK1QfO2B1JRKREOnLuEj0n\n",

"rWLdwXP4+3gyfVAMfVuF2B1LpECosEqhq1/Vn/ta1wLg5cW7cWrMlYhIgdp65AI9Jq7iwOl0qgX6\n",

"8sXwttxQL9juWCIFRoVVisSTnSII8PVk78k05mxIsjuOiEiJ8eOuk9zz4RrOXMymUbUAFo1sR4Oq\n",

"AXbHEilQKqxSJCqW9ebJThEAvP3jflIycmxOJCJS/E1bdZBhMzeRmeOiQ/1KzHu4LVUCfO2OJVLg\n",

"VFilyNzfphbhlctxLj2bd3+OtzuOiEix5XQZXlq8i5cW78YYuLd1KFMfaEU5H0+7o4kUChVWKTJe\n",

"Hg6e75o35urT1Yc4cPqizYlERIqfjGwnw2duYtqqQwA827kBr3ZvgqeHfqVLyaV3txSpDvUr07F+\n",

"JXJdhle/3WN3HBGRYuXMxSzu+WgtP+4+hbeng/f6N+fhm+pqbJWUeCqsUuSe79YIT4fFL3uT+W1f\n",

"st1xRESKhYTki/SYuIptRy5Q3s+Lz4e05s7I6nbHEikSKqxS5OpWKsfA2DAAXvlmNzlOl72BRETc\n",

"3LrEs/SatJoj5zKoFeTHguGxRIdVtDuWSJFRYRVbPHZLPSqW9ebA6XRmrj1sdxwREbf11dZjDPh4\n",

"PSkZOTQPLc+C4bHUqVTO7lgiRUqFVWwRWMaLUf8ac/XOT/GcT8+2OZGIiHsxxvDBrwk8Pmcr2U4X\n",

"nZtUZfZDbQgq52N3NJEip8IqtrknOoQGVf1Jychh/E/77Y4jIuI2cpwuxizYwZs/7APgofa1+eDe\n",

"Fvh6edicTMQeKqxiG08PBy92awTAzLWH2XcyzeZEIiL2S8vM4cFPNzJnwxEcFrx8d2Oe69oIh0OT\n",

"AKT0UmEVW8WGB3N74yq4TN4JWMYYuyOJiNjmREoGfSavYfn+05Tx8uDDAa14oG2Y3bFEbKfCKrZ7\n",

"rksjvD0crEw4wxebjtodR0TEFruPp9Ljg9XsPZlGJX8f5g1ry62NqtgdS8QtqLCK7UKD/BjSvjYA\n",

"z3y5necX7SAzx2lzKhGRorNs/2n6TF7NydRM6lUux8IRsTStGWh3LBG3ocIqbuHJThEMu6kOADPX\n",

"JtH9g1UkJOuYVhEp+easT2Lw9A2kZztpWyeIL4fHUrOCn92xRNyKCqu4BS8PB2M6N2T6oGiCynqz\n",

"92Qad763inkbj+i4VhEpkYwxvPnDXp5dsAOny9CzeQ0+HRxDYBkvu6OJuB0VVnErHepXZsnj7WkX\n",

"HkRGjpNnvtzOE3O3kpaZY3c0EZECk5Xr5Im5W/ng1wMAPH5LPd7uG4m3p34ti/wefTLE7VQO8OWz\n",

"wa35y+318XBYfLX1ON3eW8n2oxfsjiYict0uXMpmwMfr+WrrcTwdFm/2bsaTnSKwLI2tEvkjKqzi\n",

"ljwcFiM7hjN3aBuqB/py+Owlek1azccrD+oQAREptpLOXqLnpNWsP3gOfx9Ppg+KoU+rELtjibg9\n",

"FVZxa63CKvLd4+25vXEVcpyGV77ZzZBPN3JOl3IVkWJm65EL9Ji4isTT6VQP9OXL4bHcUC/Y7lgi\n",

"xYIKq7i98n7eTL6/Ja/c3RhvTwc/702m84TlrE08a3c0EZEr8v3Ok9zz4RrOpmfTuHoAC0e2o35V\n",

"f7tjiRQbKqxSLFiWxYC2YSwcEUudSmU5lZrFvR+tZfzS/ThdOkRARNzXxysPMvzzTWTmuOhYvxLz\n",

"hrWlSoCv3bFEihUVVilWGlcPZPEjN9C7ZU1cBib8HE//j9ZyIiXD7mgiIpdxugx//3rXvy47Dfe1\n",

"DuWjB1pR1sfT7mgixY4KqxQ7ZX08eatPJOP7RVLW24P1B8/RZcIKft5zyu5oIiIAZGQ7eXjmJqav\n",

"PgTAmM4N+Ef3Jnh66NeuyLXQJ0eKrR7Na/LNY+1pUiOA85dyePDTjby8eDdZubqsq4jY53RaFvd8\n",

"uIalu0/h7eng/XubM+ymuhpbJXIdVFilWKsdXJb5w2MZ3K42AJ+sOkivSas5eCbd5mQiUholJKfR\n",

"Y+Iqth1NoYKfF7OGtKZbs+p2xxIp9lRYpdjz8fTgxTsbMfWBVpT382LnsVS6vbuCRVuO2R1NREqR\n",

"tYln6TlxNUfPZ1AryI8FI9rRKqyi3bFESgQVVikxbm1UhSWPtycmrCLp2XmXPXz6i21cys61O5qI\n",

"lHCLthxjwMfrSM3MpUVoeRYMj6V2cFm7Y4mUGCqsUqJUCyzDrIda8/gt9XBY8OWmo3R7byW7j6fa\n",

"HU1ESiBjDO//Es8Tc7eS4zR0aVqVWQ+1Iaicj93RREoUFVYpcTw9HDzZKYLPh7ShSoAPiafT6T5x\n",

"FTPWHNJlXUWkwOQ4XTw7fwdv/bgfgGE31uH9/i3w9fKwOZlIyaPCKiVW27pBLHn8Rm5uUJnsXBcv\n",

"fLWLh2duIuVSjt3RRKSYS8vMYfD0DczdeASHBa/c3ZgxXRricGgSgEhhUGGVEq1iWW8+HtiK57s2\n",

"xMvD4oddp+jy7go2HT5ndzQRKaZOpGTQZ/IaVsSfoYyXBx890IoBbcPsjiVSoqmwSolnWRZD2tdh\n",

"/vBYagX5cexCBn2nrOWDXxNw6bKuInIVdh1PofsHq9h7Mo1K/j7MG9aWWxpWsTuWSImnwiqlRrOa\n",

"5fnm0Ru4K7I6TpfhzR/28cAn60lOy7Q7mogUA7/tS6bv5DWcSs0ioko5Fo6IpWnNQLtjiZQKKqxS\n",

"qvj7ejHhnij+2bsZZbw8WJlwhi4TVrBs/2m7o4mIG5u9PokHP91IeraT2LpBfPFwLDUr+NkdS6TU\n",

"UGGVUseyLPq2CmHxo+1oUNWfMxezGfjJesYu2UOO02V3PBFxIy6X4Z/f72XMgh04XYaeLWowfVAM\n",

"gWW87I4mUqqosEqpFV7Zn0Uj2zGgTS0ApixLpM/kNRw5d8nmZCLiDrJynTw+dysTfzsAwBO31uPt\n",

"PpF4e+pXp0hRu6pP3WOPPUZYWBiWZbF169b8++Pj44mNjSUiIoLo6Gh27dpVqMtECoqvlwevdG/C\n",

"5PtbEODrydYjF+gyYQXfbj9hdzQRsdH59GwGTF3P4m3H8XRYvNUnkidujcCyNLZKxA5XVVh79+7N\n",

"ypUrqVWr1mX3Dxs2jKFDh7J//35Gjx5NXFxcoS4TKWh3NKnGt4+1p0VoedKychk5azN/XbiDzByn\n",

"3dFEpIglnb1Er0mrWX/oHP6+nnw6OIbeLWvaHUukVLPMNVz6JywsjEWLFhEVFUVycjLh4eGcO3cO\n",

"T09PjDFUq1aNlStXEhAQUODLwsPDrzjnqFGjGDdu3NWunpRiOU4X45fuZ9KyAxgD9av48/69zalX\n",

"xd/uaCJSBDYnneehTzdyNj2bGuXLMG1QNBH6/IvY7roPxDly5AjVqlXD09MTyDuhJTQ0lKSkpEJZ\n",

"9keysrJITU297OZ0au+YXB0vDwfP3NGAzwbHEFzOh32n0rjz/ZXMWZ+ky7qKlHDf7zxJ/w/XcjY9\n",

"myY1Alg4IlZlVcRNlJgjx8eOHUtgYOBlt/Xr19sdS4qp9vUqseTx9rSvF0xmjotnF+zg0dlbSM3U\n",

"ZV1FShpjDFNXJDL8801k5bq4uUFl5g5tS+UAX7ujici/XHdhDQkJ4cSJE+Tm5gJ5H/ykpCRCQ0ML\n",

"ZdkfGTNmDCkpKZfdYmJirnf1pBSr5O/Dp4NieLZzAzwdFt9sP0G3d1ey7cgFu6OJSAFxugwvLd7N\n",

"P77dgzFwf5tQPhzQkrI+nnZHE5H/cN2FtXLlyrRo0YKZM2cCMH/+fGrWrEl4eHihLPsjPj4+BAQE\n",

"XHbz8PC43tWTUs7hsHj4prrMe7gtNSuUIelc3skYHy1P1GVdRYq5S9m5DJuxiemrDwHw1y4NeOXu\n",

"Jnh6lJg/PoqUGFd10tWwYcP49ttvOXnyJEFBQfj7+5OQkMC+ffuIi4vj7NmzBAQEMG3aNJo2bQpQ\n",

"KMuulE66koKUkpHDs/O3s2TnSQA61K/E230iCSrnY3MyEblayWmZDPl0I9uPpuDt6WB83yi6Nqtm\n",

"dywR+QPXNCWguFBhlYJmjGHW+iReXrybrFwXlf19eOeeKGLrBtsdTUSuUEJyGnHTNnD0fAYV/LyY\n",

"OrAVLWtVtDuWiPwJ/d1D5CpYlsV9rWvx1SPtCK9cjuS0LO6buo5xP+4jV5d1FXF7aw6cpefE1Rw9\n",

"n0FYkB8LR7RTWRUpBlRYRa5Bg6oBfP1IO/q1CsEYePeXBPp/tJbjFzLsjiYif2DhlqM88Mk6UjNz\n",

"aVmrAgtGtCMsuKzdsUTkCqiwilwjP29P3ujdjHf7N6ecjycbDp2n84QV/LjrpN3RROQ/GGN49+d4\n",

"npy7jRynoWvTanw+pDUVy3rbHU1ErpAKq8h1uiuyOt8+dgPNagaSkpHD0Bmb+PvXu8jK1YUrROyW\n",

"43Qxev52xi3dD8CwG+vwXv/m+HppioxIcaLCKlIAagWV5cuHY3mofW0Apq8+RM+Jq0k8fdHmZCKl\n",

"V2pmDoOnb2DexqM4LHilexPGdGmIw2HZHU1ErpIKq0gB8fZ08FzXRkyLi6ZiWW92HU+l23srWbD5\n",

"qN3RREqd4xcy6Dt5DSviz+Dn7cHHA6MZ0KaW3bFE5BqpsIoUsI4NKrPk8fa0rRPEpWwno+ZtY9S8\n",

"raRn5dodTaRU2HU8hR4TV7H3ZBqV/H2YN6wtHRtUtjuWiFwHFVaRQlAlwJeZQ1ozqlMEDgsWbD7G\n",

"ne+tZOexFLujiZRov+5Lpu/kNZxKzSKiSjkWjWxHkxqBdscSkeukwipSSDwcFo/dUo85Q9tSLdCX\n",

"xDPp9Jy4mumrDlKCr9chYptZ65IY8ulG0rOdtAsP4svhsdQoX8buWCJSAFRYRQpZTO2KfPdYe25t\n",

"WIVsp4u/L97N0BmbuHAp2+5oIiWCy2V4fcle/rpwB06XoXfLmkyLiyHA18vuaCJSQFRYRYpAhbLe\n",

"fPRAS/5+ZyO8PRws3X2KLhNWsOHQObujiRRrmTlOHpuzhcnLDgDw5K0RvNm7Gd6e+vUmUpLoEy1S\n",

"RCzLIq5dbRaMiKV2cFmOp2TSb8oa3vs5HqdLhwiIXK3z6dkM+Hgd32w/gZeHxdt9Inn81npYlsZW\n",

"iZQ0KqwiRaxJjUAWP3oDPZvXwGXg7aX7uX/qOk6lZtodTaTYOHw2nZ6TVrPh0Hn8fT35dFAMvVrW\n",

"tDuWiBQSFVYRG5Tz8WRcvyje7hOJn7cHaxLP0mXCCn7dl2x3NBG3tznpPD0mrubgmXRqlC/D/OGx\n",

"xIYH2x1LRAqRCquIjXq1rMniR2+gUbUAzqZnM2jaBl77bg/ZuS67o4m4pSU7TtD/w7WcS8+maY1A\n",

"Fo6MJaKKv92xRKSQqbCK2KxupXIsGBFLXGwYAB8uT6TP5NUknb1kbzARN2KMYeqKREbM2kxWrotb\n",

"GlRmztA2VPb3tTuaiBQBFVYRN+Dr5cHf72rMhwNaEljGi21HU+j67goWbztudzQR2zldhr9/vYt/\n",

"fLsHY+CBtrX48IFWlPXxtDuaiBQRFVYRN3Jb46p893h7osMqkJaVy6OztzBmwXYysp12RxOxxaXs\n",

"XIbN2Minaw5jWfB814a8dFdjPByaBCBSmqiwiriZGuXLMPuhNjx6cziWBbPXH+Gu91ey72Sa3dFE\n",

"ilRyWib9pqzlpz3J+Hg6mHhvC4a0r6OxVSKlkAqriBvy9HDw1G31+fzB1lTy9yE++SJ3vb+SWeuS\n",

"dFlXKRXiT6XR44PV7DiWQsWy3sx6qA2dm1azO5aI2ESFVcSNxYYHs+Tx9nSoX4msXBd/XbiDR2Zt\n",

"ISUjx+5oIoVm9YEz9Jy0mmMXMqgdXJYFw2NpWauC3bFExEYqrCJuLricD58MjOa5Lg3xdFh8u+ME\n",

"Xd9dwZak83ZHEylwCzYfZeAn60nLzKVVrQosGB5LWHBZu2OJiM1UWEWKAYfD4qEb6/Dl8FhCKpbh\n",

"6PkM+kxew+RlB3Dpsq5SAhhjePfneEbN20aO09C1WTVmDmlNhbLedkcTETegwipSjESFlOfbx9rT\n",

"rVk1cl2G15fsJW76Bs5czLI7msg1y3G6eObL7Yxbuh+AYTfV4b17muPr5WFzMhFxFyqsIsVMgK8X\n",

"7/Vvzus9m+Lr5WD5/tN0nrCClfFn7I4mctVSM3MYNG0DX2w6isOCf3RvwpjODXFobJWI/AcVVpFi\n",

"yLIs7okJ5etHbiCiSjlOp2Ux4JN1vP3jPk0RkGLj2IUM+kxaw8qEM/h5e/DxwGjub1PL7lgi4oZU\n",

"WEWKsYgq/nw18gbubR2KMfDeLwm8+NUulVZxezuPpdDjg1XsO5VGZX8f5g1rS8cGle2OJSJuSoVV\n",

"pJgr4+3Baz2a8s9ezbAsmLH2MH/7WqVV3Neve5PpO2UNyWlZ1K/iz8KR7WhSI9DuWCLixnQhZpES\n",

"om90CJYFz8zfzmdrDmMBf7+rsa4KJG5l5trDvPjVTlwGbggPZuL9LQjw9bI7loi4ORVWkRKkT6sQ\n",

"DDB6/vZ/XXvd4m93NlJpFdu5XIY3ftjLlGWJAPRuWZOxPZvi5aE/9InI/6bCKlLC9G0VAgZGL9jO\n",

"9NWHAFRaxVaZOU6e+mIb324/AcCoThE8enO43pMicsVUWEVKoL7RIUDe4QHTVx/CsuDFbiqtUvTO\n",

"pWcz9LONbDx8Hi8Pi3/2bkaP5jXtjiUixYwKq0gJ1Tc6BINh9PwdTFt1CAuLF7o1VGmVInPoTDqD\n",

"pm/g4Jl0/H09mTKgJbF1g+2OJSLFkAqrSAnWLzpv3NWzC3bwyaqDACqtUiQ2HT7PQ59t5Fx6NjXK\n",

"l2H6oGjqVfG3O5aIFFMqrCIl3D0xoRhgzL9Kq2XB811VWqXwfLfjBE/M3Up2rotmNQOZOrAVlf19\n",

"7Y4lIsWYCqtIKdA/Jm9P618X7uDjlQexgOdUWqWAGWOYuuIgry3ZgzFwa8PKvNu/OX7e+lUjItdH\n",

"P0VESol7W4diMDy3cCdTV+btaf1rF5VWKRi5Thcvf7Obz9YcBmBg21q8eGdjPBx6f4nI9VNhFSlF\n",

"7mtdC2Pg+UU7+WjFQSzLYkznBiqtcl3Ss3J5bPYWft6bjGXBc10a8uANtfW+EpECo8IqUsrc36YW\n",

"Bnhh0U4+XJ6IBTyr0irXKDk1k8GfbmDnsVR8PB280y+Kzk2r2R1LREoYFVaRUmhAm1pgDC98tYsp\n",

"yxPBgmfvUGmVq7P/VBqDpm3g2IUMKpb1ZurAVrQIrWB3LBEpgVRYRUqpAW3DMMCLX+1iyrJELCxG\n",

"31FfpVWuyOqEMwybuYm0zFzqBJdl2qBoagWVtTuWiJRQKqwipdgDbcOAvNI6edkBLAueuV2lVf7c\n",

"/E1HeXbBdnKchuiwCnw4oBUVynrbHUtESjAVVpFS7oG2YRgDf/t6F5N+O4AF/EWlVX6HMYZ3f05g\n",

"/E/7AejWrBpv9YnE18vD5mQiUtKpsIoIA2PDMMbw98W7mfhb3p7Wp29TaZX/LzvXxV8X7uDLTUcB\n",

"GN6hLn+5rT4Oja0SkSKgwioiAMS1q40BXlq8mw9+PYCFxVO3Rai0CikZOYz4fBOrEs7i4bB45e4m\n",

"3Ns61O5YIlKKqLCKSL5B7WpjDLz8zW7e/zUBy4JRnVRaS7NjFzIYNG09+09dpKy3B+/f14KO9Svb\n",

"HUtEShkVVhG5zOAb8va0vvLNbt77JQELeFKltVTaeSyFQdM3cDotiyoBPnwSF03j6oF2xxKRUshR\n",

"kN8sLCyM+vXrExUVRVRUFHPnzgUgPj6e2NhYIiIiiI6OZteuXfnPudZlIlJ4HryhNs93bQjAu78k\n",

"MP6neJsTSVH7Ze8p+k5Zw+m0LBpU9WfhiHYqqyJimwItrABz585l69atbN26lX79+gEwbNgwhg4d\n",

"yv79+xk9ejRxcXH5j7/WZSJSuIa0r/P/S+vP8Yxfut/mRFJUZqw9zJBPN3Ip20n7esHMe7gt1cuX\n",

"sTuWiJRiljHGFNQ3CwsLY9GiRURFReXfl5ycTHh4OOfOncPT0xNjDNWqVWPlypUEBARc07Lw8PAr\n",

"yjNq1CjGjRtXUKsnUip9tDyRV7/bA8ATt9bjiVsjbE4khcXlMrz+/V4+XJ4IQN9WNXm1R1O8PAp8\n",

"34aIyFUp8GNYH3jgAYwxxMTE8Prrr3PkyBGqVauGp2feS1mWRWhoKElJSQQGBl7Tst8rrFlZWWRl\n",

"ZV12n9PpLOjVEyl1HrqxDgCvfreHd36Kx8Li8Vvr2ZxKClpmjpOn5m3j2x0nAHiqUwSP3ByuY5dF\n",

"xC0U6P82L1++nO3bt7N582aCg4MZOHBgQX77PzV27FgCAwMvu61fv77IXl+kJHvoxjr8tUsDAMb/\n",

"tJ93f9YxrSXJufRs7pu6jm93nMDLw2J8v0gevaWeyqqIuI0CLayhoXlz+by8vHjiiSdYsWIFISEh\n",

"nDhxgtzcXCDvSilJSUmEhoZe87LfM2bMGFJSUi67xcTEFOTqiZRqQ2+sy5jOeaV13NL9vKfSWiIc\n",

"PJNOz4mr2HT4PAG+nnw2uDU9mte0O5aIyGUKrLCmp6dz4cKF/K9nz55N8+bNqVy5Mi1atGDmzJkA\n",

"zJ8/n5o1axIeHn7Ny36Pj48PAQEBl908PHS5QJGCNOymujz7r9L69tL9vP+LSmtxtunwOXpOXMWh\n",

"s5eoWaEMC0bE0rZukN2xRET+S4GddJWYmEivXr1wOp0YY6hTpw4TJkwgLCyMffv2ERcXx9mzZwkI\n",

"CGDatGk0bdoU4JqXXQmddCVSOCb9doA3vt8LwF9ur8/Ijld2IqS4j2+3n+DJeVvJznXRrGYgHw+M\n",

"ppK/j92xRER+V4FOCXA3KqwihWfibwn88/t9gEprcWKM4cPliYxdkvc/HJ0aVWHCPVH4ees6MiLi\n",

"vvQTSkSuyYgO4RgDb/6wjzd/2Idl5d0n7ivX6eLvi3cxc20SAHGxYbzQrREeDp1cJSLuTYVVRK7Z\n",

"v/eqvvnDPv75/T4sLIZ3qGtzKvk96Vm5PDp7C7/sTcay4PmujXjwhtp2xxIRuSIqrCJyXUZ2DMcY\n",

"w1s/7s8/rlWl1b2cSs1k8PQN7Dqeio+ngwn3NOeOJlXtjiUicsVUWEXkuj1ycz2MyZsc8Mb3e7Es\n",

"ePgmlVZ3sO9kGoOmred4SiZBZb2ZOrAVzUMr2B1LROSqqLCKSIF49JZ6GPJmtL6+ZC8WeWOwxD6r\n",

"Es7w8IxNpGXlUie4LNMGRVMrqKzdsURErpoKq4gUmMduydvTOv6n/YxdkrendeiNKq12+HLTUZ6d\n",

"v51clyEmrCIfPtCS8n7edscSEbkmKqwiUqAev7UeBsM7P8Xz2nd7sbB46MY6dscqNYzJ2/YT/nUl\n",

"sjsjq/Nm72b4eulCKiJSfKmwikiBe+LWCIyBCT/H8+p3e7AsGNJepbWwZee6eHbBdhZsPgbAiA51\n",

"efq2+jg0tkpEijkVVhEpFE92isAA7/4czz++3QOotBamlIwcHp6xiTWJZ/FwWPyjexP6x4TaHUtE\n",

"pECosIpIoXny1npgDO/+kqDSWoiOnr/EoGkbiE++SFlvDz64rwUd6le2O5aISIFRYRWRQmNZVv6e\n",

"1vf+VVoty9LA+gK042gKgz/dwOm0LKoG+PJJXDSNqgfYHUtEpECpsIpIobIsi1Gd8o5pff/XBF75\n",

"ZjcWMFil9br9vOcUj8zaQkaOkwZV/Zk2KJpqgWXsjiUiUuBUWEWk0FmWxVO3RWAwfPDrAV7+ZjeW\n",

"BYPaqbReqxlrDvG3r3fhMtC+XjAT72uBv6+X3bFERAqFCquIFAnLsnj6tvoYAxN/O8BLi/P2tMap\n",

"tF4Vl8vw+vd7+XB5IgD9WoXwjx5N8PJw2JxMRKTwqLCKSJGxLIu/3F4fA0z67QB/X7wby7IYGBtm\n",

"d7RiITPHyah5W/lux0kA/nJ7fUZ0qItlaWyViJRsKqwiUqQsy+KZ2/P2tE5edoC/fb0Ly4IH2obZ\n",

"Hc2tnb2YxUOfbWRz0gW8PRy82acZd0fVsDuWiEiRUGEVkSJnWRaj76iPwTBlWSIvfrULCxig0vq7\n",

"Dp5JJ27aeg6fvURgGS+mDGhJmzpBdscSESkyKqwiYgvLsnj2jgZgYMryRF74ahdYFgPa1LI7mlvZ\n",

"eOgcD322kfOXcqhZoQzTB8UQXrmc3bFERIqUCquI2MayLJ7t3AADfLg8kRcW7cQC7ldpBeCb7ccZ\n",

"NW8b2bkuIkPKM/WBVlTy97E7lohIkVNhFRFbWZbFmM4NMMbw0YqDPL9oJ5YF97UuvaXVGMOU5Ym8\n",

"vmQvAJ0aVeHde5pTxtvD5mQiIvZQYRUR21mWxV+7NMQYmLryIM8t3ImFxb2tQ+2OVuRynS7+9vUu\n",

"Pl+XBEBcbBgvdGuEh0OTAESk9FJhFRG3YFkWz3VtiAE+XnmQvy7cAVCqSmt6Vi6PzNrMr/tOY1nw\n",

"QtdGuiKYiAgqrCLiRizL4vmuDYH/X1otC/rHlPzSeio1k8HTN7DreCq+Xg4m3NOc2xtXtTuWiIhb\n",

"UGEVEbfy79JqDHyy6iBjFuzAAu4pwaV178lUBk/bwPGUTILKejN1YCuah1awO5aIiNtQYRURt2NZ\n",

"Fi90a4jBMG3VIZ5dkLentV90ySutK+PPMHzmJtKycqlTqSzT42IIDfKzO5aIiFtRYRURt2RZFi92\n",

"awTw/0srFn2jQ2xOVnDmbTzCXxfsINdliKldkQ8HtKS8n7fdsURE3I4Kq4i4rX+XVmNg+upDjF6w\n",

"HSzo26p4l1ZjDOOX7ufdXxIAuDuqOv/s3QwfT42tEhH5PSqsIuLWLMvib3fm7WmdvvoQo+dvxwL6\n",

"FNPSmp3r4tn521mw5RgAj3QMZ1SnCBwaWyUi8odUWEXE7f27tBpj+HTNYZ6Zvx0ofqU15VIOw2Zu\n",

"ZG3iOTwcFq92b1KiTyYTESkoKqwiUixYlsXf72qMAT77V2m1LIveLWvaHe2KHDl3iUHTN5CQfJFy\n",

"Pp58cF8LboqoZHcsEZFiQYVVRIoNy7J46a7GGAMz1h7mL19uA3D70rr96AUGT9/ImYtZVA3w5ZO4\n",

"aBpVD7A7lohIsaHCKiLFimVZvHx3YwyGmWuT+MuX27CAXm5aWn/afYpHZ28hI8dJg6r+TBsUTbXA\n",

"MnbHEhEpVlRYRaTYsSyLl+9qgjHw+boknv5yG5YFPVu4V2n9dPUhXlq8C5eBGyMq8cG9zfH39bI7\n",

"lohIsaPCKiLFksNh8crdTTDArHVJPPVFXmnt0dz+0upyGV77bg9TVx4E4J7oEF7p3gQvD4fNyURE\n",

"iicVVhEpthwOi3/cnbendfb6JJ6atw0Li+7Na9iWKTPHyRNztvL9rpMA/OX2+ozoUBfL0tgqEZFr\n",

"pcIqIsWa41/jocAwe/0RRs3bimXB3VFFX1rPXsxiyGcb2ZJ0AW8PB2/2aWZLDhGRkkaFVUSKvbzS\n",

"2hRjYM6GIzw5dytQtKU18fRF4qZtIOncJQLLePHhgJa0rhNUZK8vIlKSqbCKSIngcFi81qMpUPSl\n",

"dcOhczz02UYuXMohpGIZpsXFEF65XKG/rohIaaHCKiIlxr9LqzEwd2NeabUsi7siqxfaay7edpyn\n",

"5m0j2+kiMqQ8Hw9sRXA5n0J7PRGR0kiFVURKFIfDYmzPphgM8zYe5Yk5W7CAOwu4tBpjmLwskTe+\n",

"3wvAbY2qMOGe5pTx9ijQ1xERERVWESmBHA6L13s2wxj4YtNRnpibdyJWt2YFU1pznS5e/HoXs9Yl\n",

"ATC4XW2e69oQD4cmAYiIFAYVVhEpkRwOizd6NcMAX246yuNztmJh0bVZtev6vhezchn5+WaW7T+N\n",

"ZcGL3RoxqF3tggktIiK/S4VVREqs/NJqYP7mozw2ZwvANZfWkymZDJ6+gd0nUvH1cvDuPc25rXHV\n",

"gowsIiK/Q4VVREo0D4fFP3s3w2BYsPkYj83ZgmVBl6ZXV1r3nkxl0LQNnEjJJLicN1MHRhMVUr5w\n",

"QouIyGVUWEWkxPNwWLzZOxIMLNhyjEdn552I1fkKS+uK+NMMn7mZi1m51K1UlumDYgip6Fe4oUVE\n",

"JJ8ubC0ipYKHw+LNPpH0bF4Dp8vw6OwtfL/zxP983rwNRxg0bQMXs3JpXbsiC4a3U1kVESliKqwi\n",

"Umr8u7T2aF6DXJfhkVlb+H7nyd99rDGGt3/cxzPzt5PrMnSPqs5nD8YQ6OdVxKlFRMTtC2t8fDyx\n",

"sbFEREQQHR3Nrl277I4kIsWYh8PirT6RdI+q/q/Suvm/SmtWrpMn527lvV8SAHj05nDG94vCx1Mz\n",

"VkVE7OD2hXXYsGEMHTqU/fv3M3r0aOLi4uyOJCLFnIfD4u2+Udz9H6X1h115pTXlUg4DP1nPoq3H\n",

"8XBYvNGrKU/dVh/L0oxVERG7uHVhTU5OZuPGjdx///0A9OrViyNHjpCQkGBzMhEp7jwcFm/3ieSu\n",

"yLzSOvLzzcxYe5iek1axNvEc5Xw8mRYXTb/oULujioiUem49JeDIkSNUq1YNT8+8mJZlERoaSlJS\n",

"EuHh4Zc9Nisri6ysrMvuczqdRZZVRIofTw8H4/pGYoDF247zwqKdAFQL9OWTuGgaVguwN6CIiABu\n",

"vof1aowdO5bAwMDLbuvXr7c7loi4OU8PB+P7RnJnZN5lWxtWC2DhiHYqqyIibsQyxhi7Q/yR5ORk\n",

"wsPDOXfuHJ6enhhjqFatGitXrryiPawvvPACEyZMKMrIIlJMuVyGrUcv0KhaAL5eOrlKRMSduPUe\n",

"1sqVK9OiRQtmzpwJwPz586lZs+Z/lVUAHx8fAgICLrt5eOiXjohcGYfDokVoBZVVERE35NbHsAJM\n",

"mTKFuLg4XnvtNQICApg2bZrdkURERESkCLl9Ya1fvz5r1qyxO4aIiIiI2MStDwkQEREREVFhFRER\n",

"ERG3psIqIiIiIm5NhVVERERE3JoKq4iIiIi4NRVWEREREXFrKqwiIiIi4tZUWEVERETEramwioiI\n",

"iIhbs4wxxu4QhaVnz56EhYUVyWs5nU7Wr19PTEwMHh66Fvm10Da8Ptp+10/b8Ppo+10/bcPro+13\n",

"/ezYhrVq1eLxxx//08eU6MJalFJTUwkMDCQlJYWAgAC74xRL2obXR9vv+mkbXh9tv+unbXh9tP2u\n",

"n7tuQx0SICIiIiJuTYVVRERERNyaCquIiIiIuDUV1gLi4+PD3/72N3x8fOyOUmxpG14fbb/rp214\n",

"fbT9rp+24fXR9rt+7roNddKViIiIiLg17WEVEREREbemwioiIiIibk2FVURERETcmgqrjd555x1O\n",

"njxpdwwp5g4dOsTkyZP/9DGtWrXit99+K5pAxdzx48dp37693THcSmZmJt27dyciIoLIyEg6depE\n",

"QkICAB06dKB27dpERUURFRXF+PHj8583bNgwmjZtys0330xKSgoAxhg6d+7MgQMHbFkXu4SFhVG/\n",

"fv387TR37lwA4uPjiY2NJSIigujoaHbt2gVATk4O3bt3JzIykp49e5Kbmwvk/be48cYbOX/+vG3r\n",

"YoezZ8/mb7uoqCgiIiLw9PTk3Llzeg+WEiqsNlJhlYJwJYVVrlz16tVZsWKF3THcztChQ9m3bx/b\n",

"tm3j7rvvZsiQIfnLxo8fz9atW9m6dStPPvkkADt37iQ+Pp4dO3bQoUMHZsyYAcDUqVPp2LEjdevW\n",

"tWU97DR37tz87dSvXz8gr1ANHTqU/fv3M3r0aOLi4gD44YcfqFixItu2baN8+fJ8//33ALzyyis8\n",

"8sgjVKhQwa7VsEVQUFD+ttu6dStDhw6lc+fOVKxYEdB7sDRQYf0da9as4YYbbiAyMpJmzZrx1Vdf\n",

"sXHjRmJjY2nWrBkxMTGsWrUKyCsL5cuXz3/uxYsXsSwr/2vLsnjttdeIiYmhdu3aTJs2DYCXX36Z\n",

"48eP069fP6Kioti6dWtRrmKhsiyLV199ldatWxMWFsaiRYsYO3YsrVq1ol69epft6fvhhx+44YYb\n",

"aNmyJTExMfz6668AnDx5ko4dO9KyZUsaN27MI488gsvlAmD69Onceuut9O/fn6ZNm9KqVSsSExPt\n",

"WNUil5GRQb9+/WjUqBGRkZHcdtttPPzww+zbt4+oqCjuuusuAFavXk1UVBRNmjRh0KBB+XtnSrMr\n",

"fV/+38/0H32GSxNfX1+6dOmS/7OtTZs2HDp06E+f4+XlRVZWFi6Xi/T0dLy9vTlx4gSzZ89m1KhR\n",

"RZDa/SUnJ7Nx40buv/9+AHr16sWRI0dISEjAy8uLS5cuAXDp0iW8vb3Zvn07e/fupW/fvnbGdgsf\n",

"f/wxDz744J8+Ru/B/+9Kf/7l5uZy++2306pVKxo3bsy9995Leno6AJ9//jmtWrUiKysLYwx33nkn\n",

"r776atGthJHLnD171lSuXNksX77cGGOM0+k0p06dMiEhIeb77783xhizYsUKU6VKFZOWlmYOHjxo\n",

"AgMD85+flpZm/nOzAuatt94yxhizZ88eU65cOZOTk2OMMaZWrVpmy5YtRbNiRQgw77zzjjHGmJ9+\n",

"+smULVvWTJs2zRhjzLx580yrVq2MMcYcOHDAtGnTxqSkpBhjjImPjzdVq1Y1mZmZJiMjw6SlpRlj\n",

"jMnNzTVdu3Y1s2fPNsYYM23aNBMQEGASExONMcaMHj3aDB06tChX0TYLFiwwt912W/7XZ8+eNb/+\n",

"+quJjIzMvy8rK8vUrFnTLF261BhjzA8//GAA8+uvvxZxWvdype/L//uZ/rPPcGl1//33m8cee8wY\n",

"Y8xNN91k6tevb5o0aWL69u1rDhw4kP+45557zkRGRprevXub9PR0069fP7Nx40a7YtuqVq1apmnT\n",

"pqZJkyZm8ODBJjk52WzcuNFERERc9rjo6Gjz888/G6fTaYYMGWKaNWtmhg4danJycswtt9xijhw5\n",

"YtMauI9Vq1aZKlWq5H8O9R78367055/L5TJnzpzJ//fDDz9sxo4dm/99hg4dakaOHGn++c9/mjvu\n",

"uMO4XK6iW4cie6Vi4ptvvjHt27e/7L7t27ebWrVqXXZfs2bNzIoVK66osJ44cSL/6/Lly+f/wCnJ\n",

"hfXf63zhwgUDmIyMDGOMMYcOHcrfXh988IEJDg42kZGR+bfq1aub/fv3m/T0dDNixAjTrFkz07Rp\n",

"U1OlShUzevRoY0xeYb399tvzX2/RokXmlltuKdqVtMmBAwdMSEiIGT58uJkzZ45JTU39r8K6bds2\n",

"ExYWdtnz6tSpo8J6he/L3yusf/QZLo1effVV06ZNG5Oenm6MMSYpKckYk/fL7b333jMNGzb83ect\n",

"WrTIPP300+bMmTMmLi7O9OzZ08yZM6fIctvt8OHDxhhjsrOzzTPPPGM6d+78p4X1/xo/frx57733\n",

"zMGDB03//v1Nz549f/dxpcHgwYPNX/7yl/yv9R78367055/T6TTPPfeciYqKMk2aNDEhISGmX79+\n",

"+d8nIyPDNGvWzISEhJjTp08X6TrokIBr9O8/jXl6euJ0OvPvz8zM/K/H+vr65v/bw8OjVPx59t/r\n",

"7OHh8V9f/3v9jTF06tTpsuOSjh07Rr169Rg3bhzJycmsW7eO7du3c++99162bUvjNgWoU6cOu3fv\n",

"5o477mDVqlU0adLkik6++M/DVEqzK3lf/tnzruSxJdlbb73FggULWLJkCX5+fgCEhIQAee+xRx55\n",

"hMTERM6ePXvZ81JTU3nrrbd46aWXeOedd7jpppuYO3cuL7/8MhkZGUW+HnYIDQ0F8v5M/cQTT7Bi\n",

"xQpCQkI4ceLEZT8Tk5KS8h/7b4cPH+a7775jxIgRvPDCCwwdOpTp06fz6KOPFvl62O3ixYvMmzeP\n",

"wYMH59+n9+CVuZKff7NmzeKXX35h2bJl7Nixg6effvqy373JycmcP38el8vFhQsXijS/Cuv/ERsb\n",

"S3x8fP5JFy6XiypVquByuVi6dCmQd3zgyZMniYqKomrVqhhj2L17NwCfffbZFb9WQEBA/lmLpdHt\n",

"t9/OTz/9xPbt2/PvW79+PQDnz5+natWq+Pr6cvLkSb744gu7YrqVo0ePYlkWd911F2+99RbGGIKC\n",

"gi57HzVo0IDc3Nz844F/+uknnQ0r123cuHHMnj2bpUuX5h/jm5uby6lTp/IfM3/+fKpUqUJQUNBl\n",

"z3322Wd58cUX8fPzIz09HcuysCyLnJwcsrOzi3I1bJGenn7ZL/fZs2fTvHlzKleuTIsWLZg5cyaQ\n",

"t/1q1qxJeHj4Zc9//PHHGT9+PA6HI3/7/fvfpc3cuXOJjIykQYMGgN6DBe38+fMEBwcTEBBAWloa\n",

"06dPz1+Wm5vLPffcwyuvvMK4cePo27cvWVlZRZbNs8heqZioUKECCxcu5KmnniItLQ2Hw8Err7zC\n",

"ggULeOyxx3jqqafw9fXlyy+/pFy5cgC89957dOvWjaCgIHr37n3Fr/XYY4/x0EMP4efnx/Tp04mK\n",

"iiqktXJP4eHhzJo1i2HDhnHp0iWys7Np3rw5s2bN4vHHH6d37940btyY6tWrc+utt9od1y3s2LGD\n",

"MWPGYIwhNzeXAQMGEBsbS+PGjWnSpAl16tTh66+/Zu7cuYwYMQKn00l0dDSRkZF2R5di7OjRozz1\n",

"1FPUqVOHjh07AnnXG//ll1/o2rUrWVlZOBwOgoOD+frrry977qpVq8jIyKBTp04AjBw5kv79+/PG\n",

"G28wYMAAAgMDi3x9itqpU6fo1asXTqcTYwx16tTJ37kxZcoU4uLieO211wgICPivk/pmzZpFZGQk\n",

"jRs3BvKK10MPPUR2djYvvPBCka+L3T7++GMeeuih/K+zsrL0HixADzzwAF999RX169enUqVKtG/f\n",

"nsOHDwN577369eszcOBAAJYtW8YTTzzBpEmTiiSbZYwxRfJKIiIiIiLXQIcEiIiIiIhbU2EVERER\n",

"EbemwioiIiIibk2FVURERETcmgqriIiIiLg1FVYRERERcWsqrCIiIiLi1lRYRURERMStqbCKiIiI\n",

"iFtTYRURERERt6bCKiIiIiJu7f8BPplEqZknK6kAAAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-3b302021-1cd0-4906-855c-1605307c1064\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-3b302021-1cd0-4906-855c-1605307c1064\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_28['Height(Inches)'].plot(kind='line', figsize=(8, 4), title='Height(Inches)')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-e4db6a1b-ecfa-432e-b2e9-6b164a5c250f\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAz6UlEQVR4nO3deXxV9Z3/8ffJTiAbCavZCCGhQkhYpciStKK4VFFUKj+X1CWg\n",

"MuqAU8TWmWkd4aE/CvpwOpVHp4NtEYotuEw7Ljiyif4EihFFycIWtpAQyEJIQnLz/f0R7pVAgKz3\n",

"3Jv7ej4e9+G99yz3c4438e3J93y+ljHGCAAAAPBQfnYXAAAAAFwOgRUAAAAejcAKAAAAj0ZgBQAA\n",

"gEcjsAIAAMCjEVgBAADg0QisAAAA8GgEVgAAAHg0AisAAAA8GoEVANpo0aJFuv7661u9/saNG2VZ\n",

"lhoaGtr8WfX19UpLS9O2bdvavG1rvP7664qNje2SfUvSj370I73++utdtn8AvoHACsCnZGZm6uc/\n",

"//lF72dnZ+vee+9t1T6effZZffjhh26p6ze/+Y0GDx6scePGSZIOHDggy7JUWFjYqZ/fVf7t3/5N\n",

"CxYsUE1Njd2lAPBiBFYA8FCNjY1atmyZcnJy7C6l3dLT05WQkKCVK1faXQoAL0ZgBYAL1NbW6tln\n",

"n9XgwYMVFRWlyZMn64svvnAt/9d//VdNnDjR9fr48eOaPn26IiMjlZSUpDfeeEOWZWnjxo3N9vv2\n",

"228rJSVFYWFhmjp1qo4cOSJJmjNnjrZs2aKXXnpJvXr1Uq9evSRJO3fu1NGjR5WVlXXJWp3DDf7y\n",

"l7+0uG9Jqqmp0c9//nPX8qSkJP3+979vtp/ly5crMTFRERERuuuuu1RZWelaVl5erkcffVQJCQmK\n",

"jo7WTTfdpH379rmWv/nmmxo2bJjCw8MVExOj6667rtm+p02bpnXr1l3ptAPAJRFYAeACc+bM0bZt\n",

"27Rp0yaVlpbq7rvv1g033KDy8vIW1581a5YcDof279+vv//973rzzTdbXO+tt97S9u3bdfjwYZ05\n",

"c0bPPvusJOm1117TpEmT9NOf/lSnT5/W6dOnJUk7duxQUlKSevToccWaL7VvSXrkkUf04Ycf6p13\n",

"3lFlZaU++eQTpaWluZYXFxdrz549+vbbb7Vnzx7l5ubqV7/6lSTJGKPbb79dlZWV+uKLL3T06FGl\n",

"paXplltuUX19vc6cOaN7771Xr776qiorK3X48OFmny1JI0aM0Pbt2694DABwKQRWAD5nyZIlioyM\n",

"bPZYtWqVJKmsrEy///3v9etf/1qxsbEKCAjQ3LlzFRERob/+9a8X7evw4cP6+OOP9eKLLyoqKkpR\n",

"UVF64YUXWvzcxYsXKyIiQhEREZo1a9YVb6Q6efKkIiIiWnVMl9r3iRMn9MYbb+g//uM/9L3vfU+W\n",

"ZWngwIEaNWqUa9uAgAC99NJL6tGjhwYMGKDp06e7tv/iiy+0detWLV++XL1791ZwcLAWLVqk/fv3\n",

"6/PPP5ckBQYG6ttvv9WJEycUEhKiH/zgB81qi4iI0KlTp1p1HADQEgIrAJ/z9NNPq7y8vNlj1qxZ\n",

"kuS6memaa65pFmiPHDmiw4cPX7Qv55/eExISXO8lJia2+LkDBw50Pe/Zs6eqqqouW2fv3r1VUVHR\n",

"qmO61L73798vSUpNTb3ktjExMQoMDGxx+4KCAjU0NCg2NtZ1LqKjoyVJhw4dUmhoqN5//3199NFH\n",

"Sk1NVVpaml555ZVm+6+oqFBUVFSrjgMAWhJgdwEA4En69+8vSdq1a5fi4+OvuP5VV10lSTp48KCu\n",

"vvpq1/O28vO7+PrB6NGjtW/fPtXW1iokJKTN+5S+C8/5+fkaPXp0m7fv37+/goKCVFpa2izUnm/S\n",

"pEmaNGmSjDHatGmTpk2bpquvvlpTp06VJH311VcaM2ZMu+oHAIkrrADQTEJCgqZPn67HH3/cFTyr\n",

"qqr03nvv6dixYxetHxsbq8zMTC1cuNB1tbal9lRX0r9/f+Xn5zd7b/To0RowYIA2bNjQvoOR1KdP\n",

"H91zzz16/PHHlZeXJ0k6duyYdu7c2artJ06cqOHDh+vRRx9VSUmJJOnUqVNau3atzpw5o+LiYv35\n",

"z39WeXm5LMtSZGSkLMtSQMB310Pef/993X777e0+BgAgsALABVatWqXRo0dr6tSpCgsLU2pqqn77\n",

"29/KGHPJ9Y0xSkhI0MiRI3XrrbdKUpuuis6fP195eXmKiopSZGSkpKarrk899ZSWL1/eoeP57W9/\n",

"qylTpujGG29Ur169dO2112r37t2t2tbf31/r169XaGiorrnmGoWFhSk9PV1vvfWWLMuSMUavvfaa\n",

"kpKS1KtXL91555164YUXXJ0Ndu3apf379+u+++7r0DEA8G2WudRvYABAu+Tm5mrkyJE6evSoBgwY\n",

"0KF91dfXa+TIkfqv//ov1+QB3uTWW2/V7bffrp/85Cd2lwLAixFYAaCDvv76a509e1YZGRk6evSo\n",

"7r//fknSxx9/bHNlANA9MCQAADqooqJCP/7xjxUWFqbRo0crJiZGb7zxht1lAUC3wRVWAAAAeDSu\n",

"sAIAAMCjEVgBAADg0QisAAAA8GgEVgAAAHi0bh1YL5zPGgAAAN6nWwfW9sznDQAAAM/SrQMrAAAA\n",

"vB+BFQAAAB6NwAoAAACPRmAFAACARyOwAgAAwKMRWAEAAODRCKwAAADwaARWAAAAeLQ2Bdba2lpN\n",

"nz5dKSkpSk9P19SpU1VYWChJyszM1KBBg5SRkaGMjAwtW7bMtV1JSYmmTZumIUOGaPjw4dq8eXOH\n",

"lwEAAMA3BLR1g5ycHN14442yLEv//u//rocfflgbN26UJC1btkzTp0+/aJtnnnlG48eP1/vvv6/t\n",

"27fr9ttv1/79+xUYGNjuZQAAAPANbbrCGhISoptuukmWZUmSxo8frwMHDlxxuzfffFNz5syRJI0d\n",

"O1YDBw7Upk2bOrTMExlj7C4BAACg2+nQGNZXXnlFt912m+v1M888o7S0NM2cOVP79u2TJJWVlam+\n",

"vl79+/d3rZeYmKiioqJ2L2tJXV2dKisrmz0cDkdHDq/VSiprNXfVTt34yhZCKwAAQCdrd2BdtGiR\n",

"CgsLtXjxYknSH//4R+3Zs0e7du3SpEmTdMstt3Raka2xePFiRURENHts27bNLZ8d3iNQ6785rj3F\n",

"Vco7XuWWzwQAAPAV7QqsS5Ys0bp16/Tee+8pNDRUkhQXFydJsixLc+fO1b59+1RWVqbo6GgFBASo\n",

"uLjYtf2BAwcUHx/f7mUtWbhwoSoqKpo9xo0b157Da7OQQH9NGBwtSdqwp9QtnwkAAOAr2hxYly5d\n",

"qtWrV2v9+vWKjIyUJDU0NOj48eOuddauXat+/fopOropxN1111167bXXJEnbt2/XkSNHNGXKlA4t\n",

"u1BwcLDCw8ObPfz9/dt6eO2WNbSvJGlDXonbPhMAAMAXtKlLwOHDhzV//nwlJSUpKytLUlNQ/Pjj\n",

"j3XzzTerrq5Ofn5+iomJ0bvvvuva7sUXX9R9992nIUOGKCgoSCtXrnTd6d/eZZ4mM6WvpN36+8FT\n",

"qqipV0QPz6wTAADA21imG98lNG/ePC1dutRtn/fDX23U3tJq/cf/GaWb0ga47XMBAAC6M2a66kSZ\n",

"qeeGBexhWAAAAEBnIbB2oqxzgXVjfqkaG7vthWsAAAC3IrB2orGDohQa5K/Sqjp9c6zS7nIAAAC6\n",

"BQJrJwoO8Ne1yTGSGBYAAADQWQisnez8YQEAAADoOAJrJ8tM7SNJ+qLolE5Vn7W5GgAAAO9HYO1k\n",

"AyN7KLVfmBqNtLmAq6wAAAAdRWDtAplDm66ybswjsAIAAHQUgbULOMexbsovlYP2VgAAAB1CYO0C\n",

"oxOiFBYcoJPVZ7XrcLnd5QAAAHg1AmsXCPT306SUpvZWDAsAAADoGAJrF8lMOdfeKo9+rAAAAB1B\n",

"YO0iU861t/rycIVKq+psrgYAAMB7EVi7SL/wEA0bGC5J2swkAgAAAO1GYO1Czm4BGxgWAAAA0G4E\n",

"1i6Uda4f65aCE2pwNNpcDQAAgHcisHahjLgoRfQIVEVNvXIPldtdDgAAgFcisHYhfz9Lk1OarrIy\n",

"LAAAAKB9CKxdLOtct4ANe7jxCgAAoD0IrF1sckofWZb0zbFKFVfU2l0OAACA1yGwdrGYXsEaERsp\n",

"SdqUz7AAAACAtiKwukHmuXGsTNMKAADQdgRWN8ga2tSPdUvBCdXT3goAAKBNCKxuMOKqCEX3DNLp\n",

"ugbtOHDK7nIAAAC8CoHVDfz8LE1xDQtgHCsAAEBbEFjdJHMo07QCAAC0B4HVTSYPiZGfJeUfP60j\n",

"5TV2lwMAAOA1CKxuEhkapJHxUZIYFgAAANAWBFY3YtYrAACAtiOwulFmatM41q2FJ1TX4LC5GgAA\n",

"AO9AYHWjYQPD1TcsWDX1Dm3bf9LucgAAALwCgdWNLMtSZiqzXgEAALQFgdXNnMMCaG8FAADQOgRW\n",

"N5s4JEb+fpb2lVbrYFm13eUAAAB4PAKrm4WHBGpMgrO9FcMCAAAAroTAaoMsZr0CAABoNQKrDbLO\n",

"jWP9bG+ZautpbwUAAHA5BFYbpPTrpYERIapraNRn+8rsLgcAAMCjEVhtYFmWppy7yrpxD8MCAAAA\n",

"LofAahPXNK15pTLG2FwNAACA5yKw2uTa5BgF+lsqOnlG+07Q3goAAOBSCKw26RkcoGsGRUuSNjAs\n",

"AAAA4JIIrDZyTtO6KZ9+rAAAAJdCYLWRc5rWz/edVHVdg83VAAAAeCYCq40G9+mpuN49dNbRqE/3\n",

"0t4KAACgJQRWG1mW5ZpEgFmvAAAAWkZgtVnWef1YaW8FAABwsTYF1traWk2fPl0pKSlKT0/X1KlT\n",

"VVhYKEkqKSnRtGnTNGTIEA0fPlybN292bdcVy7qL8UnRCg7w09GKWhWUnLa7HAAAAI/T5iusOTk5\n",

"ysvL05dffqnbbrtNDz/8sCTpmWee0fjx41VQUKAVK1Zo1qxZqq+v77Jl3UWPIH+NT6K9FQAAwKW0\n",

"KbCGhITopptukmVZkqTx48frwIEDkqQ333xTc+bMkSSNHTtWAwcO1KZNm7psWXfy3axXBFYAAIAL\n",

"BXRk41deeUW33XabysrKVF9fr/79+7uWJSYmqqioqEuWtaSurk51dXXN3nM4HB05PLfJTO0r/fc3\n",

"2nHglCpr6xUeEmh3SQAAAB6j3TddLVq0SIWFhVq8eHFn1tNuixcvVkRERLPHtm3b7C6rVRJjeiop\n",

"pqcaGo22FpywuxwAAACP0q7AumTJEq1bt07vvfeeQkNDFR0drYCAABUXF7vWOXDggOLj47tkWUsW\n",

"LlyoioqKZo9x48a15/BskUl7KwAAgBa1ObAuXbpUq1ev1vr16xUZGel6/6677tJrr70mSdq+fbuO\n",

"HDmiKVOmdNmyCwUHBys8PLzZw9/fv62HZ5usoU3jWDfmldLeCgAA4DxtGsN6+PBhzZ8/X0lJScrK\n",

"ypLUFBQ///xzvfjii7rvvvs0ZMgQBQUFaeXKlQoMbBqL2RXLuptxg3qrR6C/Sqrq9M2xSg0bGGF3\n",

"SQAAAB7BMt34ct68efO0dOlSu8totYd/v10ffVuif7ohVY9nJdtdDgAAgEdgpisP4hrHSj9WAAAA\n",

"FwKrB8k81491Z9EplZ85a3M1AAAAnoHA6kFio0KV0q+XGo20hfZWAAAAkgisHof2VgAAAM0RWD2M\n",

"c1jAprxSNTZ22/vhAAAAWo3A6mHGJPRWr+AAlVWf1VdHKuwuBwAAwHYEVg8TFOCnickxkhgWAAAA\n",

"IBFYPdL5s14BAAD4OgKrB5qS0nTj1ZeHy1V2us7magAAAOxFYPVA/SNC9L0B4TJG2lzAVVYAAODb\n",

"CKweKutct4ANewisAADAtxFYPVTW0KZhAZvyS+WgvRUAAPBhBFYPNTIuUuEhAaqoqVfuoVN2lwMA\n",

"AGAbAquHCvD30+QUugUAAAAQWD0Y07QCAAAQWD3alHNXWL8+UqmSylqbqwEAALAHgdWD9QkL1ojY\n",

"CEnSxnyGBQAAAN9EYPVwzmEBGxkWAAAAfBSB1cM5+7FuKTihekejzdUAAAC4H4HVw42IjVRUaKCq\n",

"ahu08yDtrQAAgO8hsHo4fz/LdfPVBtpbAQAAH0Rg9QLOWa8YxwoAAHwRgdULTB7SR5Yl7Smu0tHy\n",

"GrvLAQAAcCsCqxeI6hmkkXGRkpj1CgAA+B4Cq5fIor0VAADwUQRWL+Hsx7q18ITqGhw2VwMAAOA+\n",

"BFYvMWxguGJ6Bav6rEM7DtDeCgAA+A4Cq5fw87OUeW4SgQ17GBYAAAB8B4HVizjHsW5gHCsAAPAh\n",

"BFYvMnFIjPz9LO0trdahk2fsLgcAAMAtCKxeJKJHoEbHR0miWwAAAPAdBFYvkzmUaVoBAIBvIbB6\n",

"Gec41k/3nlBtPe2tAABA90dg9TJD+4epf3iIausb9f/2ldldDgAAQJcjsHoZy7KUdW5YANO0AgAA\n",

"X0Bg9UJTUpimFQAA+A4Cqxe6Njlagf6WDpSd0f4T1XaXAwAA0KUIrF4oLCRQYxN7S2LWKwAA0P0R\n",

"WL0Us14BAABfQWD1Us4brz7fd1JnzjbYXA0AAEDXIbB6qcF9eik2qofOOhr12V7aWwEAgO6LwOql\n",

"LMtSZqpz1iuGBQAAgO6LwOrFXONY95TKGGNzNQAAAF2DwOrFvj84WkEBfjpSXqPCktN2lwMAANAl\n",

"CKxeLDQoQOOToiUxLAAAAHRfBFYvl5XKNK0AAKB7I7B6ucxz41i3Hzipqtp6m6sBAADofG0KrE88\n",

"8YQSExNlWZZyc3Nd7ycmJio1NVUZGRnKyMjQmjVrXMsKCgo0YcIEpaSkaOzYsdq9e3eHl+E7g2J6\n",

"KjE6VPUOo62FtLcCAADdT5sC65133qlPPvlECQkJFy1bs2aNcnNzlZubq5kzZ7renz17tnJycpSf\n",

"n68FCxYoOzu7w8vQnPMq60bGsQIAgG6oTYF18uTJio2NbfX6JSUl2rFjh+69915J0owZM3To0CEV\n",

"Fha2exkuljXUGVhpbwUAALqfThvDev/99ystLU0PPfSQSkubbgA6dOiQBgwYoICAAElNze7j4+NV\n",

"VFTU7mWXUldXp8rKymYPh8PRWYfn0a4Z1FshgX4qrqzVnuIqu8sBAADoVJ0SWDdv3qxdu3Zp586d\n",

"iomJ0QMPPNAZu22TxYsXKyIiotlj27Ztbq/DDiGB/rp2cIwk2lsBAIDup1MCa3x8vCQpMDBQTz31\n",

"lLZs2SJJiouL07Fjx9TQ0CBJMsaoqKhI8fHx7V52KQsXLlRFRUWzx7hx4zrj8LyCc5rWjXtobwUA\n",

"ALqXDgfW6upqlZeXu16vXr1aI0eOlCT17dtXo0aN0sqVKyVJa9euVWxsrJKTk9u97FKCg4MVHh7e\n",

"7OHv79/Rw/Mazhuv/l50ShVnaG8FAAC6D8u04S6d2bNn629/+5uKi4sVHR2tsLAwffjhh5oxY4Yc\n",

"DoeMMUpKStIrr7yixMRESVJeXp6ys7NVVlam8PBwrVixQmlpaR1a1lrz5s3T0qVL27SNN7tu6SYV\n",

"lpzWv88aqVtGDLS7HAAAgE7RpsDqbXwtsL7wt2/02y37NWNUrH51d7rd5QAAAHQKZrrqRrLODQvY\n",

"lF+qxsZu+/8hAADAxxBYu5Exib3VM8hfJ07XaffRSrvLAQAA6BQE1m4kKMBP1ybT3goAAHQvBNZu\n",

"xjnrFYEVAAB0FwTWbsbZjzX3ULlOVp+1uRoAAICOI7B2MwMiemho/zAZI20pYBIBAADg/Qis3ZBz\n",

"EoENexgWAAAAvB+BtRvKOjcsYFN+qRy0twIAAF6OwNoNjUqIUlhIgE6dqdeXh8vtLgcAAKBDCKzd\n",

"UKC/nyYPabrKupFhAQAAwMsRWLspZ7eAjfnceAUAALwbgbWbmnIusO46XKHSqjqbqwEAAGg/Ams3\n",

"1TcsRMOvCpfUdPMVAACAtyKwdmNZqcx6BQAAvB+BtRtz9mPdnF+qBkejzdUAAAC0D4G1G8uIi1Rk\n",

"aKCqahu0s6jc7nIAAADahcDajfn7WZqScq5bAMMCAACAlyKwdnPO9lYb8rjxCgAAeCcCazc3eUgf\n",

"WZb07bFKFVfU2l0OAABAmxFYu7noXsFKj42UxLAAAADgnQisPoD2VgAAwJsRWH1A1tCmcaxbC8t0\n",

"toH2VgAAwLsQWH3A8IERiukVpNN1Ddpx8KTd5QAAALQJgdUH+PlZmuxqb0W3AAAA4F0IrD7CNY51\n",

"D+NYAQCAdyGw+ojJQ/rIz5IKSk7r8KkzdpcDAADQagRWHxERGqjRCVGSGBYAAAC8C4HVh2SeGxZA\n",

"P1YAAOBNCKw+xDlN69bCMtXWO2yuBgAAoHUIrD7k6gHh6hsWrJp6h7btp70VAADwDgRWH2JZFrNe\n",

"AQAAr0Ng9THOWa+48QoAAHgLAquPuTY5RgF+lvafqNaBE9V2lwMAAHBFBFYfExYSqDGJzvZWDAsA\n",

"AACej8Dqg74bx8qwAAAA4PkIrD4oa2hTYP1sX5lqztLeCgAAeDYCqw8a0reXrorsobMNjfps3wm7\n",

"ywEAALgsAqsPsizLNYkA3QIAAICnI7D6KOc41o/3lMgYY3M1AAAAl0Zg9VETkqMV5O+nw6dqtLeU\n",

"9lYAAMBzEVh9VGhQgK5J6i2J9lYAAMCzEVh9WCbTtAIAAC9AYPVhWeduvNq2/6RO1zXYXA0AAEDL\n",

"CKw+bFBMTyVEh6reYfRpIe2tAACAZyKw+jDLspSZ0nSVlVmvAACApyKw+rjMc7NebcyjvRUAAPBM\n",

"BFYf9/2kaAUH+OlYRa3yjlfZXQ4AAMBF2hRYn3jiCSUmJsqyLOXm5rreLygo0IQJE5SSkqKxY8dq\n",

"9+7dXboMnSck0F8TBkdLkjbsYVgAAADwPG0KrHfeeac++eQTJSQkNHt/9uzZysnJUX5+vhYsWKDs\n",

"7OwuXYbOlXXesAAAAABPY5l2DFxMTEzU22+/rYyMDJWUlCg5OVknT55UQECAjDEaMGCAPvnkE4WH\n",

"h3f6suTk5FbXOW/ePC1durSth+dzisrOaPL/3SB/P0tf/PNUhYcE2l0SAACAS4fHsB46dEgDBgxQ\n",

"QECApKY7z+Pj41VUVNQlyy6lrq5OlZWVzR4Oh6Ojh+cT4qNDldSnpxyNRp8U0N4KAAB4lm5z09Xi\n",

"xYsVERHR7LFt2za7y/IaWc5Zr/YwLAAAAHiWDgfWuLg4HTt2TA0NTTMlGWNUVFSk+Pj4Lll2KQsX\n",

"LlRFRUWzx7hx4zp6eD7DGVg35peqsZH2VgAAwHN0OLD27dtXo0aN0sqVKyVJa9euVWxsrJKTk7tk\n",

"2aUEBwcrPDy82cPf37+jh+czxg6KUmiQv0qr6vTNsUq7ywEAAHBp001Xs2fP1t/+9jcVFxcrOjpa\n",

"YWFhKiwsVF5enrKzs1VWVqbw8HCtWLFCaWlpktQly1qLm67a5pE/7ND6b47r6etTNPcHQ+wuBwAA\n",

"QFI7uwR4CwJr27zx+UH97K2vNTohSmsfnWB3OQAAAJK60U1X6LjMc+NYvyg6pVPVZ22uBgAAoAmB\n",

"FS5XRfZQar8wNRppcwGzXgEAAM9AYEUzmUP7SJI25hFYAQCAZyCwohlne6tNtLcCAAAegsCKZkYn\n",

"RCksOEAnq89q15EKu8sBAAAgsKK5QH8/TRwSI4lZrwAAgGcgsOIirlmv8gisAADAfgRWXGRKatON\n",

"V18ertCJ03U2VwMAAHwdgRUX6RceomEDwyVJm/PpFgAAAOxFYEWLMs9dZd1AeysAAGAzAita5BzH\n",

"ujm/VA2ORpurAQAAvozAihZlxEUqokegKmrqlXuo3O5yAACADyOwokUB/n6anOIcFkC3AAAAYB8C\n",

"Ky4pK5VpWgEAgP0IrLikySl9ZFnS7qOVOl5Za3c5AADARxFYcUkxvYI14qoISdImrrICAACbEFhx\n",

"WZnnugUwjhUAANiFwIrLyhraFFi3FJxQPe2tAACADQisuKwRV0UoumeQTtc1aMeBU3aXAwAAfBCB\n",

"FZfl52dpyrn2VhvzGRYAAADcj8CKK5ribG+1hxuvAACA+xFYcUWTh/SRnyXlHa/SkfIau8sBAAA+\n",

"hsCKK4rqGaSR8VGSpI10CwAAAG5GYEWrOGe92sCwAAAA4GYEVrSKsx/rp3tPqK7BYXM1AADAlxBY\n",

"0SrDBoarb1iwzpx1aPt+2lsBAAD3IbCiVSzru/ZWzHoFAADcicCKVnPOekVgBQAA7kRgRatNHBIj\n",

"fz9L+0qrVVR2xu5yAACAjyCwotXCQwI1JuFceytmvQIAAG5CYEWbuIYF7CGwAgAA9yCwok0yz/Vj\n",

"/XRvmWrraW8FAAC6HoEVbZLaL0wDIkJU19Coz/aV2V0OAADwAQRWtIllWa5JBDYyLAAAALgBgRVt\n",

"5pqmNa9UxhibqwEAAN0dgRVtdm1yjAL9LRWdPKP9J6rtLgcAAHRzBFa0Wc/gAI0b1FtS01VWAACA\n",

"rkRgRbtkOcexMusVAADoYgRWtIvzxqvP951UdV2DzdUAAIDujMCKdhncp6fievfQWUejPt1LeysA\n",

"ANB1CKxoF8uyGBYAAADcgsCKdvsusNLeCgAAdB0CK9ptfFK0ggL8dKS8RgUlp+0uBwAAdFMEVrRb\n",

"jyB/fT8pWpK0gVmvAABAFyGwokO+m/WKwAoAALoGgRUd4mxvtePAKVXV1ttcDQAA6I4IrOiQxJie\n",

"SorpqYZGo62FJ+wuBwAAdEOdGlgTExOVmpqqjIwMZWRkaM2aNZKkgoICTZgwQSkpKRo7dqx2797t\n",

"2qa9y+A5pjiHBexhmlYAAND5Ov0K65o1a5Sbm6vc3FzNnDlTkjR79mzl5OQoPz9fCxYsUHZ2tmv9\n",

"9i6D53C2t9qQV0J7KwAA0Om6fEhASUmJduzYoXvvvVeSNGPGDB06dEiFhYXtXgbPMm5Qb/UI9FdJ\n",

"VZ2+OVZpdzkAAKCb6fTAev/99ystLU0PPfSQSktLdejQIQ0YMEABAQGSmmZIio+PV1FRUbuXtaSu\n",

"rk6VlZXNHg6Ho7MPDy0ICfTXtclN7a025jEsAAAAdK5ODaybN2/Wrl27tHPnTsXExOiBBx7ozN1f\n",

"1uLFixUREdHssW3bNrd9vq/LZJpWAADQRTo1sMbHx0uSAgMD9dRTT2nLli2Ki4vTsWPH1NDQIEky\n",

"xqioqEjx8fHtXtaShQsXqqKiotlj3LhxnXl4uIzMczde/f3gKVWcob0VAADoPJ0WWKurq1VeXu56\n",

"vXr1ao0cOVJ9+/bVqFGjtHLlSknS2rVrFRsbq+Tk5HYva0lwcLDCw8ObPfz9/Tvr8HAFsVGhGtK3\n",

"lxqNtLmAYQEAAKDzBHTWjo4fP64ZM2bI4XDIGKOkpCT94Q9/kCQtX75c2dnZWrRokcLDw7VixQrX\n",

"du1dBs+TNbSvCkpOa0NeiX6UPtDucgAAQDdhmW7ch2jevHlaunSp3WX4jE/3ntCs336u6J5B2v6z\n",

"6+TnZ9ldEgAA6AaY6QqdZkxCb/UKDlBZ9Vl9fbTC7nIAAEA3QWBFpwkK8NPE5BhJzHoFAAA6D4EV\n",

"ncrZLWAD7a0AAEAnIbCiUzn7sX55uFxlp+tsrgYAAHQHBFZ0qv4RIfregHAZ2lsBAIBOQmBFp8ty\n",

"DgtgHCsAAOgEBFZ0uqyhTcMCNheUytHYbbumAQAANyGwotONjItUeEiAys/UK/dQud3lAAAAL0dg\n",

"RacL8PfTpJSmYQEb6RYAAAA6iMCKLpF1rlsA7a0AAEBHEVjRJaacu8L69ZFKlVTV2lwNAADwZgRW\n",

"dIk+YcEaERshSdqUR7cAAADQfgRWdBnnJAIbCawAAKADCKzoMs5pWjcXlKre0WhzNQAAwFsRWNFl\n",

"0mMjFRUaqKraBu08eMrucgAAgJcisKLL+PtZrpuvNjAsAAAAtBOBFV3KOesV/VgBAEB7EVjRpSYP\n",

"6SPLkvYUV+lYRY3d5QAAAC9EYEWXiuoZpIy4SEl0CwAAAO1DYEWXc816tYdhAQAAoO0IrOhyzsC6\n",

"tfCE6hocNlcDAAC8DYEVXW7YwHDF9ApW9VmHdhygvRUAAGgbAiu6nJ+f5ZpEgG4BAACgrQiscAtn\n",

"YKUfKwAAaCsCK9xiUnIf+ftZKiw5rUMnz9hdDgAA8CIEVrhFRGigRsdHSWJYAAAAaBsCK9wmcyjD\n",

"AgAAQNsRWOE2zvZWn+49odp62lsBAIDWIbDCbYb2D1P/8BDV1jfq8/0n7S4HAAB4CQIr3Mayvmtv\n",

"xaxXAACgtQiscKvMc8MCuPEKAAC0FoEVbnVtcrQC/S0dKDuj/Seq7S4HAAB4AQIr3CosJFBjE3tL\n",

"4iorAABoHQIr3M7ZLYD2VgAAoDUIrHA7541X/29fmc6cbbC5GgAA4OkIrHC75L69dFVkD51taNRn\n",

"e8vsLgcAAHg4AivczrIsZblmvWIcKwAAuDwCK2zhGse6p1TGGJurAQAAnozAClt8f3C0ggL8dKS8\n",

"RntLT9tdDgAA8GAEVtgiNChA45OiJTVdZQUAALgUAitsk5nCOFYAAHBlBFbYJmto0zjW7QdOqqq2\n",

"3uZqAACApyKwwjaDYnoqMTpU9Q6jrYW0twIAAC0jsMJWmee6BWzKZ1gAAABoGYEVtnIOC6C9FQAA\n",

"uBQCK2x1zaDeCgn0U3FlrfYUV9ldDgAA8EAEVtgqJNBfEwbHSKJbAAAAaJnHB9aCggJNmDBBKSkp\n",

"Gjt2rHbv3m13SehkWalN7a020o8VAAC0wOMD6+zZs5WTk6P8/HwtWLBA2dnZdpeETua88ervRadU\n",

"UUN7KwAA0FyA3QVcTklJiXbs2KEPP/xQkjRjxgzNnTtXhYWFSk5Otrk6dJa43qFK7ttLhSWn9Yv/\n",

"3q3E6J7ysyQ/P0t+ltX03Pruub+fJcuy5O/X9NqyLPlblvz8zl/Pungf5z33t5r2cf7+nM/9LEvW\n",

"ec/P//ymdXXx83PLLT999/yCfViWZfep7nTGGBkjNRqjxnP//O5103vmvGXO5Y5Gc8G6zm3PW7ex\n",

"+f4c5y9vvPS+L9yfo/HyyxvPe895PBceY7PXLZ4HXXad1txQ2NIq5oI9tbxO5+zn4nouXulKx9na\n",

"fbfFhbV3eH+dXl8n6+QCO7u+rrg3tqv/Hbf2e9piHa36mbvyz0pH6mjtOW+xjlZ8ZkvHndIvTPd/\n",

"P7F1H+wmHh1YDx06pAEDBiggoKlMy7IUHx+voqKiiwJrXV2d6urqmr3ncDjcVis65gdD+6qw5LTW\n",

"7TxidyldxnIFX10yVLvC+Hkh1xnM/Szr3Lrnbe/XfF+WZcnR2HIQu2SobGxa7mgpYDZeOZACALqX\n",

"rNQ+BNausnjxYv3iF79o9t748eNtqgZtNWfKYPlZlk7X1Z93Bc1c9Nx5lc1x3hU25/PzA1jjBQHN\n",

"eUXu/Ct7jktc8XO4Pu+77R3nBbdmz1u4Incpzs9s+t8o30x654ftCwO81ewK9/nBvCmInx/Oz7+y\n",

"7dqPny69bbOr4pdebl3iSviF77Runcsvb2k/LV6Dv2g/LXx2qz6rHftpRUEtrdPZf0vo7D9OtHTs\n",

"Hdpfp9fnPt3xLz9S+77vTetdeV9N77X9Z7cjdbS8TvuP6cIVL1xnUEzPlraylWU8uPllSUmJkpOT\n",

"dfLkSQUEBMgYowEDBuiTTz5p1RXW5557Tq+88oo7S4YPMhcE4GaB+bznznB7fuh1NF4QrFsI3Odf\n",

"MXU+d5iLw7jzT9zOYNY8FF4QzvzOf91y8Dt/ecuh8hL7vjBUnvdZAAC0h0dfYe3bt69GjRqllStX\n",

"Kjs7W2vXrlVsbGyL41eDg4MVHBzc7D1/f393lQofZjnDmVuviwAA4Ds8OrBK0vLly5Wdna1FixYp\n",

"PDxcK1assLskAAAAuJHHB9bU1FR99tlndpcBAAAAm3h8H1YAAAD4NgIrAAAAPBqBFQAAAB6NwAoA\n",

"AACPRmAFAACARyOwAgAAwKMRWAEAAODRCKwAAADwaARWAAAAeDTLGGPsLqKr3HHHHUpMTHTLZzkc\n",

"Dm3btk3jxo2Tv7+/Wz6zu+Ecdgznr+M4hx3D+es4zmHHcP46zo5zmJCQoCeffPKy63TrwOpOlZWV\n",

"ioiIUEVFhcLDw+0uxytxDjuG89dxnMOO4fx1HOewYzh/Heep55AhAQAAAPBoBFYAAAB4NAIrAAAA\n",

"PBqBtZMEBwfrX/7lXxQcHGx3KV6Lc9gxnL+O4xx2DOev4ziHHcP56zhPPYfcdAUAAACPxhVWAAAA\n",

"eDQCKwAAADwagRUAAAAejcBqo5dfflnFxcV2lwEvd+DAAb322muXXWfMmDHauHGjewryckePHtWk\n",

"SZPsLsOj1NbWavr06UpJSVF6erqmTp2qwsJCSVJmZqYGDRqkjIwMZWRkaNmyZa7tZs+erbS0NP3g\n",

"Bz9QRUWFJMkYoxtvvFF79+615VjskpiYqNTUVNd5WrNmjSSpoKBAEyZMUEpKisaOHavdu3dLkurr\n",

"6zV9+nSlp6frjjvuUENDg6SmfxeTJ0/WqVOnbDsWO5SVlbnOXUZGhlJSUhQQEKCTJ0/yHfQRBFYb\n",

"EVjRGVoTWNF6AwcO1JYtW+wuw+Pk5OQoLy9PX375pW677TY9/PDDrmXLli1Tbm6ucnNz9Y//+I+S\n",

"pK+//loFBQX66quvlJmZqT/+8Y+SpP/8z/9UVlaWBg8ebMtx2GnNmjWu8zRz5kxJTYEqJydH+fn5\n",

"WrBggbKzsyVJH3zwgXr37q0vv/xSkZGRev/99yVJzz//vObOnauoqCi7DsMW0dHRrnOXm5urnJwc\n",

"3Xjjjerdu7ckvoO+gMDags8++0wTJ05Uenq6RowYoXfeeUc7duzQhAkTNGLECI0bN05bt26V1BQW\n",

"IiMjXduePn1almW5XluWpUWLFmncuHEaNGiQVqxYIUn65S9/qaNHj2rmzJnKyMhQbm6uOw+xS1mW\n",

"pRdeeEHXXHONEhMT9fbbb2vx4sUaM2aMhgwZ0uxK3wcffKCJEydq9OjRGjdunDZs2CBJKi4uVlZW\n",

"lkaPHq1hw4Zp7ty5amxslCS9/vrruu6663TPPfcoLS1NY8aM0b59++w4VLerqanRzJkzdfXVVys9\n",

"PV3XX3+95syZo7y8PGVkZOjWW2+VJH366afKyMjQ8OHD9ZOf/MR1dcaXtfZ7eeHP9KV+hn1JSEiI\n",

"brrpJtfvtvHjx+vAgQOX3SYwMFB1dXVqbGxUdXW1goKCdOzYMa1evVrz5s1zQ9Wer6SkRDt27NC9\n",

"994rSZoxY4YOHTqkwsJCBQYG6syZM5KkM2fOKCgoSLt27dKePXt0991321m2R/jd736nhx566LLr\n",

"8B38Tmt//zU0NOiGG27QmDFjNGzYMM2aNUvV1dWSpDfeeENjxoxRXV2djDH60Y9+pBdeeMF9B2HQ\n",

"TFlZmenbt6/ZvHmzMcYYh8Nhjh8/buLi4sz7779vjDFmy5Ytpl+/fqaqqsrs37/fREREuLavqqoy\n",

"559WSWbJkiXGGGO+/fZb06tXL1NfX2+MMSYhIcF88cUX7jkwN5JkXn75ZWOMMR999JHp2bOnWbFi\n",

"hTHGmDfffNOMGTPGGGPM3r17zfjx401FRYUxxpiCggLTv39/U1tba2pqakxVVZUxxpiGhgZz8803\n",

"m9WrVxtjjFmxYoUJDw83+/btM8YYs2DBApOTk+POQ7TNunXrzPXXX+96XVZWZjZs2GDS09Nd79XV\n",

"1ZnY2Fizfv16Y4wxH3zwgZFkNmzY4OZqPUtrv5cX/kxf7mfYV917773miSeeMMYYM2XKFJOammqG\n",

"Dx9u7r77brN3717Xej/72c9Menq6ufPOO011dbWZOXOm2bFjh11l2yohIcGkpaWZ4cOHmwcffNCU\n",

"lJSYHTt2mJSUlGbrjR071vzv//6vcTgc5uGHHzYjRowwOTk5pr6+3vzwhz80hw4dsukIPMfWrVtN\n",

"v379XD+HfAevrLW//xobG82JEydcz+fMmWMWL17s2k9OTo55/PHHzUsvvWSmTZtmGhsb3XcMbvsk\n",

"L/HXv/7VTJo0qdl7u3btMgkJCc3eGzFihNmyZUurAuuxY8dcryMjI12/cLpzYHUec3l5uZFkampq\n",

"jDHGHDhwwHW+fv3rX5uYmBiTnp7uegwcONDk5+eb6upq89hjj5kRI0aYtLQ0069fP7NgwQJjTFNg\n",

"veGGG1yf9/bbb5sf/vCH7j1Im+zdu9fExcWZRx991PzpT38ylZWVFwXWL7/80iQmJjbbLikpicDa\n",

"yu9lS4H1Uj/DvuiFF14w48ePN9XV1cYYY4qKiowxTf9xe/XVV833vve9Frd7++23zdNPP21OnDhh\n",

"srOzzR133GH+9Kc/ua1uux08eNAYY8zZs2fNT3/6U3PjjTdeNrBeaNmyZebVV181+/fvN/fcc4+5\n",

"4447WlzPFzz44IPmn/7pn1yv+Q5eWWt//zkcDvOzn/3MZGRkmOHDh5u4uDgzc+ZM135qamrMiBEj\n",

"TFxcnCktLXXrMTAkoJ2cfxoLCAiQw+FwvV9bW3vRuiEhIa7n/v7+PvHnWecx+/v7X/TaefzGGE2d\n",

"OrXZuKQjR45oyJAhWrp0qUpKSvT5559r165dmjVrVrNz64vnVJKSkpL0zTffaNq0adq6dauGDx/e\n",

"qpsvzh+m4sta87283HatWbc7W7JkidatW6f33ntPoaGhkqS4uDhJTd+xuXPnat++fSorK2u2XWVl\n",

"pZYsWaJf/OIXevnllzVlyhStWbNGv/zlL1VTU+P247BDfHy8pKY/Uz/11FPasmWL4uLidOzYsWa/\n",

"E4uKilzrOh08eFD/8z//o8cee0zPPfeccnJy9Prrr+sf/uEf3H4cdjt9+rTefPNNPfjgg673+A62\n",

"Tmt+/61atUoff/yxNm3apK+++kpPP/10s//2lpSU6NSpU2psbFR5eblb6yewXmDChAkqKChw3XTR\n",

"2Niofv36qbGxUevXr5fUND6wuLhYGRkZ6t+/v4wx+uabbyRJf/jDH1r9WeHh4a67Fn3RDTfcoI8+\n",

"+ki7du1yvbdt2zZJ0qlTp9S/f3+FhISouLhYf/7zn+0q06McPnxYlmXp1ltv1ZIlS2SMUXR0dLPv\n",

"0dChQ9XQ0OAaD/zRRx9xNyw6bOnSpVq9erXWr1/vGuPb0NCg48ePu9ZZu3at+vXrp+jo6GbbPvPM\n",

"M/rnf/5nhYaGqrq6WpZlybIs1dfX6+zZs+48DFtUV1c3+4/76tWrNXLkSPXt21ejRo3SypUrJTWd\n",

"v9jYWCUnJzfb/sknn9SyZcvk5+fnOn/O575mzZo1Sk9P19ChQyXxHexsp06dUkxMjMLDw1VVVaXX\n",

"X3/dtayhoUE//vGP9fzzz2vp0qW6++67VVdX57baAtz2SV4iKipKb731lubPn6+qqir5+fnp+eef\n",

"17p16/TEE09o/vz5CgkJ0V/+8hf16tVLkvTqq6/qlltuUXR0tO68885Wf9YTTzyhRx55RKGhoXr9\n",

"9deVkZHRRUflmZKTk7Vq1SrNnj1bZ86c0dmzZzVy5EitWrVKTz75pO68804NGzZMAwcO1HXXXWd3\n",

"uR7hq6++0sKFC2WMUUNDg+677z5NmDBBw4YN0/Dhw5WUlKR3331Xa9as0WOPPSaHw6GxY8cqPT3d\n",

"7tLhxQ4fPqz58+crKSlJWVlZkprmG//444918803q66uTn5+foqJidG7777bbNutW7eqpqZGU6dO\n",

"lSQ9/vjjuueee/Tiiy/qvvvuU0REhNuPx92OHz+uGTNmyOFwyBijpKQk18WN5cuXKzs7W4sWLVJ4\n",

"ePhFN/WtWrVK6enpGjZsmKSm4PXII4/o7Nmzeu6559x+LHb73e9+p0ceecT1uq6uju9gJ7r//vv1\n",

"zjvvKDU1VX369NGkSZN08OBBSU3fvdTUVD3wwAOSpE2bNumpp57Sb37zG7fUZhljjFs+CQAAAGgH\n",

"hgQAAADAoxFYAQAA4NEIrAAAAPBoBFYAAAB4NAIrAAAAPBqBFQAAAB6NwAoAAACPRmAFAACARyOw\n",

"AgAAwKMRWAEAAODRCKwAAADwaP8f7tQA/WrAncsAAAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-e4db6a1b-ecfa-432e-b2e9-6b164a5c250f\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-e4db6a1b-ecfa-432e-b2e9-6b164a5c250f\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_29['Weight(Pounds)'].plot(kind='line', figsize=(8, 4), title='Weight(Pounds)')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-917d73ef-0139-42eb-acea-b53ee4e3775c\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAA22klEQVR4nO3de3xU9Z3/8feZXCGQhCRczQ1MAi2XBASkVCVRQNG2smKlVbHZ\n",

"imAttS52i27X3662ytqHBX24vbjdFtpSKLZYq9t6iYUAslpEN6LYBMItAQkJgZAQwiSZ+f7+SGbI\n",

"cM11zlxez8djHsyc6+cchsybyfd8jmWMMQIAAAAClMPuAgAAAIBLIbACAAAgoBFYAQAAENAIrAAA\n",

"AAhoBFYAAAAENAIrAAAAAhqBFQAAAAGNwAoAAICARmAFAABAQCOwAkAXDRgwQMXFxZ1ePj8/X//6\n",

"r//arX2tXbtWt9xyS7fW9Zfy8nJZlqUDBw5cdtkf/ehHKiws7POaAIQWAiuAkPb8889r2LBh6ngX\n",

"6o0bN8qyLD3xxBM+y95222266667LrvNU6dOKT8/v9dqLC4ulmVZam1t9Zl+5swZfec739GTTz7p\n",

"nVZYWKioqCgNGDBAAwcOVHZ2tv7jP/6j12rpa0uWLNGbb76pHTt22F0KgCBCYAUQ0mbNmqWjR4/q\n",

"o48+8k4rKirSuHHj9NZbb3mnuVwubdq0SbNnz7ajzAtat26dUlNTlZeX5zN9/vz5OnXqlOrr6/WT\n",

"n/xEjz/+uFavXm1LjV0VExOju+++WytXrrS7FABBhMAKIKSNGTNG6enpKioq8k4rKirSv//7v+v9\n",

"99/XqVOnJEnvvfee6urqNHPmTP3tb39Tfn6+kpOTlZGRoccee8zn20/LsnzC7qpVq5SVlaWBAwfq\n",

"tttu05IlS877BrahoUF33nmnEhISlJaWpp/+9KeSpIqKCs2ZM0eSlJiYqAEDBuipp56SJG3YsEE3\n",

"3njjRY/NsizNmjVLY8eO1fvvvy9Jeuedd3Tttddq0KBBGjlypB555BE5nc6L1n7gwAFZlqXy8nJJ\n",

"0urVq5WamqoXXnhBmZmZSkhI0Je//GXV19d719m7d69uuOEGxcfH6zOf+Yw2bdrkU9eHH36oGTNm\n",

"KDExUYMGDdJVV12lsrIy7/ybbrpJr7766nnfKAPAxRBYAYS8WbNmeQNrbW2tPvnkE918882aOHGi\n",

"dyxqUVGRPvvZz+rUqVO64YYbdP/99+vo0aPasmWLXnnlFT399NMX3PaWLVt0//336/nnn1ddXZ0W\n",

"LlyoX/7yl+ctt3r1ai1cuFAnTpzQs88+qyVLlqi8vFzp6el67bXXJEl1dXU6deqU/uVf/kWStGPH\n",

"Do0bN+6ix+V2u/Xmm2/q448/1tSpU1VRUaGZM2dq3rx5Onr0qN588029+uqrWrZsWZfOV1VVlUpL\n",

"S/X3v/9dpaWlKikp0Y9+9CNJbd9Ef/GLX1R6erqOHDmioqIi/fznP/dZ/4EHHtANN9ygY8eOqaam\n",

"Rr/4xS+UmJjonT9hwgQ1NDSotLS0S3UBCF8EVgAhb/bs2dqyZYucTqf++te/atq0aerXr59mzpzp\n",

"DbJFRUWaPXu2fvzjH+uLX/yivvKVrygyMlIZGRn67ne/q1WrVl1w27/+9a916623as6cOYqIiNDN\n",

"N9+sm2+++bzl5s2bp+uvv14Oh0Pz5s1TUlKS91vRizl+/LgSEhLOm/7iiy8qMTFRgwcP1tKlS/Xk\n",

"k09qwYIF+u1vf6ucnBw99NBDio6OVnZ2tn7wgx/ov/7rv3zG8F5OZGSkfvjDH6pfv34aPny45s6d\n",

"q+3bt0uS3n33XZWVlenZZ59VXFycUlNT9dhjj/msHx0drYqKCh08eFCRkZHKy8vT0KFDvfM9x3T8\n",

"+PFO1wQgvBFYAYS8G264QU6nU9u2bVNRUZFmzpzpnV5UVKRTp07p3Xff1axZs7Rnzx798Y9/VGJi\n",

"ovfxjW98Q1VVVRfc9uHDh5WRkeEzLTMz87zlRowY4fM6Li5ODQ0Nl6w7KSlJJ0+ePG/6HXfcobq6\n",

"OtXW1urjjz/Www8/LEmqrKzUlVde6bNsVlaWmpqaVFNTc8l9dZSSkqKoqKgL1nro0CENGjTIJ0iP\n",

"HDnSZ/3Vq1fLsixdf/31Sk1N1UMPPeQdeiHJe0xJSUmdrglAeCOwAgh5ycnJmjRpkoqKinwC67Rp\n",

"01RZWak1a9bIsizNmDFDw4YN05133qm6ujrvo76+3idwdXTFFVfo4MGDPtPOfX05DseFfxRfddVV\n",

"2rVrV6e3k5aWpn379vlM27t3r/r166fBgwdLamvJ1djY6J3/6aefdqnW1NRUnThxwidIn9vOKiMj\n",

"Qz//+c918OBBFRcXq6ioSMuXL/fO/+ijjzRgwACNGTOmS/sGEL4IrADCwuzZs/WrX/1KJ0+e1OTJ\n",

"kyVJUVFRuvbaa/XEE09o+vTpiouL0wMPPKA//OEP+v3vf6/m5ma5XC6Vl5fr9ddfv+B2FyxYoD/9\n",

"6U9644035HK59Prrr+svf/lLl2obNmyYJPlcmCS1tdl64403Or2dO++8U2VlZXr++efV3NysvXv3\n",

"6rHHHtPChQtlWZYkafLkyVq9erXOnDmjo0eP6vHHH+9SrVdffbWys7O1dOlSNTY26vDhw/rBD37g\n",

"s8zq1at16NAhGWMUHx+vyMhIRUZGeue//vrr+sIXvuAzDQAuhcAKICzMnj1bR44cUUFBgc83mjNn\n",

"ztSRI0c0a9YsSdKUKVO8FxJdccUVSk5O1u23337Rb01nzJihn/zkJ3rggQeUmJioF154QXfddZdi\n",

"Y2M7XVtOTo6+9a1vqaCgQImJid6+qnfddZcqKipUUlLSqe1kZGTozTff1Pr16zVkyBBdf/31mjNn\n",

"jn74wx96l/nxj3+sqqoqpaSkaNasWVqwYEGn65Taxre++uqr2r9/v4YPH66ZM2fq3nvv9Vlm06ZN\n",

"mjp1qgYMGKDc3Fx97nOf81741dzcrN/85jdaunRpl/YLILxZpisj8QEAlzV37lwNHTpUL7zwQo+3\n",

"9dvf/lZr167Vn//8516ozH4rVqzQhx9+qF/96ld2lwIgiBBYAaCHNmzYoFmzZqlfv3566aWXdNdd\n",

"d2njxo267rrr7C4NAEICA4gAoIdeffVV3XfffWpublZGRoZ++ctfElYBoBfxDSsAAAACGhddAQAA\n",

"IKARWAEAABDQCKwAAAAIaARWAAAABLSQDqzPPfec3SUAAACgh0I6sHb1ft4AAAAIPCEdWAEAABD8\n",

"CKwAAAAIaARWAAAABDQCKwAAAAIagRUAAAABjcAKAACAgEZgBQAAQEAjsAIAACCgdSmwnjlzRnPn\n",

"zlVOTo5yc3M1a9YslZeXS5Ly8/M1cuRI5eXlKS8vTytXrvSuV11drZtuuknZ2dkaN26ctmzZ0uN5\n",

"AAAACA+RXV1h0aJFmjNnjizL0n/+539q4cKFKi4uliStXLlSc+fOPW+dRx55RNOmTdPrr7+u9957\n",

"T//wD/+g/fv3KyoqqtvzAAAAEB669A1rbGysbr75ZlmWJUmaNm2aDhw4cNn1XnzxRd1///2SpClT\n",

"pmjEiBHavHlzj+YFImOM3SUAAACEnB6NYX3uued06623el8/8sgjGj9+vObPn699+/ZJkmpra9XS\n",

"0qJhw4Z5l8vMzFRFRUW3512I0+lUfX29z8PlcvXk8Dqtuv6Mlqz9QHOe20poBQAA6GXdDqxPPfWU\n",

"ysvLtXz5cknSb37zG5WWlmrnzp269tpr9YUvfKHXiuyM5cuXKyEhweexfft2v+w7vl+U3vr7UZVW\n",

"NajsaINf9gkAABAuuhVYn3nmGb300kt67bXX1L9/f0lSWlqaJMmyLC1ZskT79u1TbW2tkpOTFRkZ\n",

"qaqqKu/6Bw4cUHp6erfnXcijjz6qkydP+jymTp3ancPrstioCH1uVLIkaVNpjV/2CQAAEC66HFhX\n",

"rFihdevWqaioSImJiZKk1tZWHT161LvMhg0bNHToUCUnt4W4L3/5y/rZz34mSXrvvfd0+PBhzZgx\n",

"o0fzzhUTE6P4+HifR0RERFcPr9sKxgyRJG0qq/bbPgEAAMJBl7oEHDp0SA8//LBGjRqlgoICSW1B\n",

"cePGjbrlllvkdDrlcDiUkpKiV155xbve008/rQULFig7O1vR0dFas2aN90r/7s4LNPk5QyTt0vsH\n",

"T+hkU4sS+gVmnQAAAMHGMiF8ldDSpUu1YsUKv+3vhh8Va29No3585yTdMmG43/YLAAAQyrjTVS8q\n",

"GM2wAAAAgN5GYO1FnnGsxWU1crtD9otrAAAAvyKw9qLJmYMUFx2hY6ec2vVpvd3lAAAAhAQCay+K\n",

"iYzQ57NSJDEsAAAAoLcQWHsZ7a0AAAB6F4G1l+WPHixJKqms0/HGZpurAQAACH4E1l42PKGfxgwb\n",

"KGOkLbu56xUAAEBPEVj7AMMCAAAAeg+BtQ94+rFu3l0jF+2tAAAAeoTA2gcmpSdqYGyk6k63qKSy\n",

"zu5yAAAAghqBtQ9ERjh0XU7bxVfFDAsAAADoEQJrH+E2rQAAAL2DwNpHZrR/w/rx4XpV15+xuRoA\n",

"AIDgRWDtI4MHxmhCaoIkqZj2VgAAAN1GYO1D+e3DAhjHCgAA0H0E1j5U0H7Xq617jqnF5ba5GgAA\n",

"gOBEYO1DE1ITlRQXrYYzrfrg4Am7ywEAAAhKBNY+FOGwvBdfbSpjHCsAAEB3EFj7WP5o+rECAAD0\n",

"BIG1j12XPVgOSyqtatCndU12lwMAABB0CKx9bFBctCamD5IkFTMsAAAAoMsIrH6Q7x3HyrAAAACA\n",

"riKw+kHBmLZ+rNvKj8nZ6rK5GgAAgOBCYPWDzw6P1+CBMTrd7NJ7+2lvBQAA0BUEVj9wOCyGBQAA\n",

"AHQTgdVPPMMCCKwAAABdQ2D1k2uyUxThsLSvplEHaxvtLgcAACBoEFj9JD42SpMzaG8FAADQVQRW\n",

"P2JYAAAAQNcRWP2oYHRbYH1nb62ammlvBQAA0BkEVj/KGTpAIxJi5Wx16919tXaXAwAAEBQIrH5k\n",

"WZbyGRYAAADQJQRWP/MMC9hYWi1jjM3VAAAABD4Cq59NvzJZ0REOHTrRpL01tLcCAAC4HAKrn8XF\n",

"ROrqUUmSpGKGBQAAAFwWgdUG+aMZxwoAANBZBFYbFIweLEnavv+4Tjlbba4GAAAgsBFYbTAyJU4Z\n",

"yf3V4jLaVn7M7nIAAAACGoHVBpZlebsFMI4VAADg0gisNslvHxZQXFZDeysAAIBLILDaZNqoZMVG\n",

"OXTk5BmVHW2wuxwAAICARWC1SWxUhKZfmSJJ2lRaY3M1AAAAgYvAaiNPtwDaWwEAAFwcgdVGnn6s\n",

"7x88oZNNLTZXAwAAEJgIrDZKS+qvrCED5HIbvb2H9lYAAAAXQmC1GcMCAAAALo3AarN8bz/WGrnd\n",

"tLcCAAA4V5cC65kzZzR37lzl5OQoNzdXs2bNUnl5uSSpurpaN910k7KzszVu3Dht2bLFu15fzAsV\n",

"kzMHKS46QsdOObXr03q7ywEAAAg4Xf6GddGiRSorK9OHH36oW2+9VQsXLpQkPfLII5o2bZr27Nmj\n",

"VatW6c4771RLS0ufzQsVMZER+nxWe3srhgUAAACcp0uBNTY2VjfffLMsy5IkTZs2TQcOHJAkvfji\n",

"i7r//vslSVOmTNGIESO0efPmPpsXSgrGtA0LILACAACcL7InKz/33HO69dZbVVtbq5aWFg0bNsw7\n",

"LzMzUxUVFX0y70KcTqecTqfPNJfL1ZPD8xvPbVpLKut0vLFZSXHRNlcEAAAQOLp90dVTTz2l8vJy\n",

"LV++vDfr6bbly5crISHB57F9+3a7y+qU4Qn9NGbYQBkjbdnNXa8AAAA66lZgfeaZZ/TSSy/ptdde\n",

"U//+/ZWcnKzIyEhVVVV5lzlw4IDS09P7ZN6FPProozp58qTPY+rUqd05PFswLAAAAODCuhxYV6xY\n",

"oXXr1qmoqEiJiYne6V/+8pf1s5/9TJL03nvv6fDhw5oxY0afzTtXTEyM4uPjfR4RERFdPTzbFLS3\n",

"t9q8u0Yu2lsBAAB4dWkM66FDh/Twww9r1KhRKigokNQWFP/2t7/p6aef1oIFC5Sdna3o6GitWbNG\n",

"UVFRktQn80LNpPREDYyNVN3pFpVU1umqjEF2lwQAABAQLGNMyH6dt3TpUq1YscLuMjrtm2s/0J93\n",

"HtG3rs/Sw7NH210OAABAQOBOVwHEMyyAcawAAABnEVgDyIyctvZWHx+uV3X9GZurAQAACAwE1gAy\n",

"eGCMJqQmSJKKaW8FAAAgicAacPLbhwUUMywAAABAEoE14BS03/Vq6+5janG5ba4GAADAfgTWADMh\n",

"NVFJcdFqcLbq/YMn7C4HAADAdgTWABPhsLwXX9EtAAAAgMAakPLbhwVsLuPCKwAAAAJrALoue7Ac\n",

"llRa1aBP65rsLgcAAMBWBNYANCguWhPT227NWsy3rAAAIMwRWAOUp1sA41gBAEC4I7AGKE8/1m3l\n",

"x+RsddlcDQAAgH0IrAFq7Ih4DRkYo9PNLr23n/ZWAAAgfBFYA5RlWd5uAQwLAAAA4YzAGsA8wwII\n",

"rAAAIJwRWAPYNdkpinBY2lfTqIO1jXaXAwAAYAsCawCLj43S5AzaWwEAgPBGYA1wBWMYFgAAAMIb\n",

"gTXAFbSPY31nb62ammlvBQAAwg+BNcDlDB2gEQmxcra69e6+WrvLAQAA8DsCa4CzLEv5DAsAAABh\n",

"jMAaBDzDAjaWVssYY3M1AAAA/kVgDQLTr0xWdIRDh040aW8N7a0AAEB4IbAGgbiYSF09KkmSVMyw\n",

"AAAAEGYIrEGCu14BAIBwRWANEgWjB0uStu8/rlPOVpurAQAA8B8Ca5AYmRKnjOT+anEZbSs/Znc5\n",

"AAAAfkNgDRKWZXm7BTCOFQAAhBMCaxDJbx8WsKm0hvZWAAAgbBBYg8i0UcmKjXKoqv6MSqsa7C4H\n",

"AADALwisQSQ2KkLTr0yRRLcAAAAQPgisQcbTLaC4rMbmSgAAAPyDwBpkPP1Y3z94QiebWmyuBgAA\n",

"oO8RWINMWlJ/ZQ0ZIJfb6O09tLcCAAChj8AahDzDAhjHCgAAwgGBNQid7cdaI7eb9lYAACC0EViD\n",

"0OTMJMVFR+jYKad2fVpvdzkAAAB9isAahKIjHbomm/ZWAAAgPBBYg5RnWACBFQAAhDoCa5Ca0X7h\n",

"VUllnY43NttcDQAAQN8hsAap4Qn9NGbYQBkjbdnNTQQAAEDoIrAGsYIxDAsAAAChj8AaxDzjWDfv\n",

"rpGL9lYAACBEEViD2KT0RA2MjVTd6RaVVNbZXQ4AAECfILAGscgIh67Labv4qphhAQAAIEQRWIMc\n",

"7a0AAECoI7AGuRnt37B+fLhe1fVnbK4GAACg93UpsD744IPKzMyUZVkqKSnxTs/MzNTo0aOVl5en\n",

"vLw8rV+/3jtvz549mj59unJycjRlyhTt2rWrx/Nw1uCBMZqQmiBJKqa9FQAACEFdCqy333673n77\n",

"bWVkZJw3b/369SopKVFJSYnmz5/vnb548WItWrRIu3fv1rJly1RYWNjjefCV3z4sgHGsAAAgFHUp\n",

"sF533XVKTU3t9PLV1dXasWOH7r77bknSvHnzVFlZqfLy8m7Pw/kK2u96tXX3MbW43DZXAwAA0Lt6\n",

"bQzrPffco/Hjx+vee+9VTU3br6YrKys1fPhwRUZGSpIsy1J6eroqKiq6Pe9inE6n6uvrfR4ul6u3\n",

"Di+gTUhNVFJctBqcrXr/4Am7ywEAAOhVvRJYt2zZop07d+qDDz5QSkqKvva1r/XGZrtk+fLlSkhI\n",

"8Hls377d73XYIcJheS++olsAAAAINb0SWNPT0yVJUVFReuihh7R161ZJUlpamo4cOaLW1lZJkjFG\n",

"FRUVSk9P7/a8i3n00Ud18uRJn8fUqVN74/CCQn77sIDiUi68AgAAoaXHgbWxsVF1dXXe1+vWrdPE\n",

"iRMlSUOGDNGkSZO0Zs0aSdKGDRuUmpqqrKysbs+7mJiYGMXHx/s8IiIienp4QeO67MFyWFLZ0QYd\n",

"rmuyuxwAAIBeYxljOn0T+sWLF+vPf/6zqqqqlJycrIEDB+rNN9/UvHnz5HK5ZIzRqFGj9Nxzzykz\n",

"M1OSVFZWpsLCQtXW1io+Pl6rVq3S+PHjezSvs5YuXaoVK1Z0aZ1gNu+n/6v3D57Qk/8wTnddfX4n\n",

"BwAAgGDUpcAabMItsP7nxj165s3dmvXZofr5PZPtLgcAAKBXcKerEOLpx7qt/JicreHRIQEAAIQ+\n",

"AmsIGTsiXkMGxuh0s0vv7ae9FQAACA0E1hBiWZa3WwDtrQAAQKggsIaYgvZhAQRWAAAQKgisIebz\n",

"2SmKdFjaV9Oog7WNdpcDAADQYwTWEBMfG6XJmYMkScVl3EQAAAAEPwJrCGJYAAAACCUE1hBUMKYt\n",

"sL6zt1ZNzbS3AgAAwY3AGoKyhwzQiIRYOVvdendfrd3lAAAA9AiBNQRZlqX8MQwLAAAAoYHAGqI8\n",

"41g3llYrhO++CwAAwgCBNURNvzJZ0REOHTrRpL01tLcCAADBi8AaouJiInX1qCRJUjHDAgAAQBAj\n",

"sIawfNpbAQCAEEBgDWEFowdLkrbvP65TzlabqwEAAOgeAmsIG5kSp4zk/mpxGW0rP2Z3OQAAAN1C\n",

"YA1hlmV5uwUwjhUAAAQrAmuIy28fFrCptIb2VgAAICgRWEPctFHJio1yqKr+jEqrGuwuBwAAoMsI\n",

"rCEuNipC069MkUS3AAAAEJwIrGHA0y2guLTG5koAAAC6jsAaBjz9WN+vOKGTp1tsrgYAAKBrCKxh\n",

"IC2pv7KGDJDLbbS1nG9ZAQBAcCGwhgnvsIAyAisAAAguBNYwcbYfa43cbtpbAQCA4EFgDROTM5MU\n",

"Fx2hY6ec2vVpvd3lAAAAdBqBNUxERzp0TTbtrQAAQPAhsIYRz7AAAisAAAgmBNYw4mlvVVJZp+ON\n",

"zTZXAwAA0DkE1jAyLCFWnxkeL2OkLbvpFgAAAIIDgTXMeNpbMSwAAAAECwJrmCkY0zYsYPPuGrlo\n",

"bwUAAIIAgTXMTExLVHxspOpOt6ikss7ucgAAAC6LwBpmIiMcujbHc9crhgUAAIDAR2ANQ7S3AgAA\n",

"wYTAGoZmtH/D+vHhelXXn7G5GgAAgEsjsIahwQNjNCE1QZJUTHsrAAAQ4AisYcpzEwHGsQIAgEBH\n",

"YA1Tnn6sW3cfU4vLbXM1AAAAF0dgDVMTUhOVFBetBmer3j94wu5yAAAALorAGqYiHJb34iu6BQAA\n",

"gEBGYA1j+e3DAopLufAKAAAELgJrGLsue7AcllR2tEGH65rsLgcAAOCCCKxhbFBctCamD5JEtwAA\n",

"ABC4CKxhztMtYBPDAgAAQIAisIY5Tz/W/917TM5Wl83VAAAAnI/AGubGjojXkIExOt3s0nv7aW8F\n",

"AAACT5cC64MPPqjMzExZlqWSkhLv9D179mj69OnKycnRlClTtGvXrj6dh95jWZa3WwDtrQAAQCDq\n",

"UmC9/fbb9fbbbysjI8Nn+uLFi7Vo0SLt3r1by5YtU2FhYZ/OQ+8qaB8WQGAFAACByDLGmK6ulJmZ\n",

"qZdffll5eXmqrq5WVlaWjh8/rsjISBljNHz4cL399tuKj4/v9XlZWVmdrnPp0qVasWJFVw8v7NSf\n",

"adGkJ4rU6jba/M/5ykiOs7skAAAArx6PYa2srNTw4cMVGRkpqe1XzOnp6aqoqOiTeRfjdDpVX1/v\n",

"83C5uIioM+JjozQ509Peim4BAAAgsITMRVfLly9XQkKCz2P79u12lxU0GBYAAAACVY8Da1pamo4c\n",

"OaLW1lZJkjFGFRUVSk9P75N5F/Poo4/q5MmTPo+pU6f29PDCRsGYtsD6zt5aNTXzzTQAAAgcPQ6s\n",

"Q4YM0aRJk7RmzRpJ0oYNG5SamqqsrKw+mXcxMTExio+P93lERET09PDCRvaQAboisZ+crW69u6/W\n",

"7nIAAAC8unTR1eLFi/XnP/9ZVVVVSk5O1sCBA1VeXq6ysjIVFhaqtrZW8fHxWrVqlcaPHy9JfTKv\n",

"s7joqmu+98eP9Nu/Veiez2XoiVvH2V0OAACApG52CQgWBNaueeuTo1r46x1KHdRPW79bIMuy7C4J\n",

"AAAgdC66Qs9Nz0pWdIRDh040aW9No93lAAAASCKwooP+0ZG6elSSJKmYbgEAACBAEFjhI5/2VgAA\n",

"IMAQWOGjYPRgSdL2/cd1ytlqczUAAAAEVpxjZEqcMpL7q8VltK38mN3lAAAAEFjhy7Is712vGMcK\n",

"AAACAYEV58lvHxawqbRGIdz1DAAABAkCK84zbVSyYqMcqqo/o9KqBrvLAQAAYY7AivPERkVo+pUp\n",

"kugWAAAA7EdgxQV5ugUUl9bYXAkAAAh3BFZckKcf6/sVJ3TydIvN1QAAgHBGYMUFpSX1V9aQAXK5\n",

"jbaW8y0rAACwD4EVF1XQoVsAAACAXQisuChPP9bNu6vldtPeCgAA2IPAiouanJmkuOgIHTvVrF2f\n",

"1ttdDgAACFMEVlxUdKRD12TT3goAANiLwIpL8gwLILACAAC7EFhxSZ72ViWVdTre2GxzNQAAIBwR\n",

"WHFJwxJi9Znh8TJG2rKbbgEAAMD/CKy4LG97K4YFAAAAGxBYcVkFYzztrWrkor0VAADwMwIrLmti\n",

"WqLiYyNVd7pFJZV1dpcDAADCDIEVlxUZ4dB1OW3DAooZFgAAAPyMwIpOob0VAACwC4EVnTKj/cKr\n",

"jw/Xq7r+jM3VAACAcEJgRaekDIhRbmqCJKmY9lYAAMCPCKzotBntwwIYxwoAAPyJwIpO8/Rj3br7\n",

"mFpcbpurAQAA4YLAik6bkJqopLhoNThb9f7BE3aXAwAAwgSBFZ0W4bA0I4e7XgEAAP8isKJL8tuH\n",

"BRSXcuEVAADwDwIruuS67MFyWFLZ0QYdrmuyuxwAABAGCKzokkFx0ZqYPkgS3QIAAIB/EFjRZZ5u\n",

"AZsYFgAAAPyAwIouy2/vx7qt/JicrS6bqwEAAKGOwIouGzsiXkMGxqipxaXt+4/bXQ4AAAhxBFZ0\n",

"mWVZ3m4BDAsAAAB9jcCKbingNq0AAMBPCKzols9npyjSYWnfsUYdrG20uxwAABDCCKzolvjYKE3O\n",

"9LS3YlgAAADoOwRWdJtnWAC3aQUAAH2JwIpuKxjTFljf2VurpmbaWwEAgL5BYEW3ZQ8ZoCsS+8nZ\n",

"6ta7+2rtLgcAAIQoAiu6zae9FcMCAABAHyGwokc841g3llbLGGNzNQAAIBQRWNEj07OSFR3h0KET\n",

"TdpbQ3srAADQ+wis6JH+0ZG6elSSJG4iAAAA+kavBtbMzEyNHj1aeXl5ysvL0/r16yVJe/bs0fTp\n",

"05WTk6MpU6Zo165d3nW6Ow+Bg/ZWAACgL/X6N6zr169XSUmJSkpKNH/+fEnS4sWLtWjRIu3evVvL\n",

"li1TYWGhd/nuzkPg8LS32r7/uE45W22uBgAAhJo+HxJQXV2tHTt26O6775YkzZs3T5WVlSovL+/2\n",

"PASWkSlxykzurxaX0bbyY3aXAwAAQkyvB9Z77rlH48eP17333quamhpVVlZq+PDhioyMlNTWCik9\n",

"PV0VFRXdnnchTqdT9fX1Pg+Xi2b2/pLfPiyAcawAAKC39Wpg3bJli3bu3KkPPvhAKSkp+trXvtab\n",

"m7+k5cuXKyEhweexfft2v+0/3Hn7sZbW0N4KAAD0ql4NrOnp6ZKkqKgoPfTQQ9q6davS0tJ05MgR\n",

"tba2jW00xqiiokLp6endnnchjz76qE6ePOnzmDp1am8eHi5h2qhkxUY5VFV/RqVVDXaXAwAAQkiv\n",

"BdbGxkbV1dV5X69bt04TJ07UkCFDNGnSJK1Zs0aStGHDBqWmpiorK6vb8y4kJiZG8fHxPo+IiIje\n",

"OjxcRmxUhKZfmSKJbgEAAKB3WaaXfn+7b98+zZs3Ty6XS8YYjRo1Ss8995wyMzNVVlamwsJC1dbW\n",

"Kj4+XqtWrdL48eMlqdvzOmPp0qVasWJFbxweOuE37xzQY3/apamZSXrx/s/ZXQ4AAAgRvRZYAxGB\n",

"1b8qj5/WtT/cpAiHpQ/+dZYS+kfZXRIAAAgB3OkKvSYtqb+yhgyQy220tbzG7nIAAECIILCiVxV0\n",

"6BYAAADQGwis6FWe27Ru3l0ttztkR5sAAAA/IrCiV03OTFJcdISOnWrWx5+etLscAAAQAgis6FXR\n",

"kQ5dk93e3ophAQAAoBcQWNHrPMMC6McKAAB6A4EVvS6/PbB+eKhOxxubba4GAAAEOwIret2whFh9\n",

"Zni8jJG27GZYAAAA6BkCK/qEt70VwwIAAEAPEVjRJwrGeNpb1chFeysAANADBFb0iYlpiYqPjVTd\n",

"6RaVVNbZXQ4AAAhiBFb0icgIh67LaRsWUMywAAAA0AMEVvQZ2lsBAIDeQGBFn5nRfuHVx4frVV1/\n",

"xuZqAABAsCKwos+kDIhRbmqCJKmY9lYAAKCbCKzoU56bCDCOFQAAdBeBFX3K095q6+5janG5ba4G\n",

"AAAEIwIr+tSEKxKUHBetBmer3j94wu5yAABAECKwok85HJZm5HDXKwAA0H0EVvQ5T7eA4lIuvAIA\n",

"AF1HYEWfuy57sByWVHa0QYfrmuwuBwAABBkCK/rcoLhoTUwfJIluAQAAoOsIrPCLgvZhAZsYFgAA\n",

"ALqIwAq/8PRj3VZ+TM5Wl83VAACAYEJghV+MHRGvIQNj1NTi0vb9x+0uBwAABBECK/zCsizlMywA\n",

"AAB0A4EVflPAbVoBAEA3EFjhN5/PTlGkw9K+Y406cKzR7nIAAECQILDCb+JjozQ5k/ZWAACgawis\n",

"8CvPsIBNZYxjBQAAnUNghV8VjGkLrO/uq1VTM+2tAADA5RFY4VfZQwboisR+cra69e6+WrvLAQAA\n",

"QYDACr/yaW/FOFYAANAJBFb4nWcc68bSahljbK4GAAAEOgIr/G56VrKiIxw6dKJJe2tobwUAAC6N\n",

"wAq/6x8dqatHJUmivRUAALg8Aitscba9FYEVAABcGoEVtvC0t9q+/7hOOVttrgYAAAQyAitsMTIl\n",

"TpnJ/dXiMtpWfszucgAAQAAjsMI2+e3DAhjHCgAALoXACtt4hgVsKq2hvRUAALgoAitsc/XIJMVG\n",

"OVRVf0alVQ12lwMAAAIUgRW2iY2K0OevTJFEtwAAAHBxBFbYKr99WEBxaY3NlQAAgEBFYIWt8nMG\n",

"S5Lerzihk6dbbK4GAAAEIgIrbJWW1F9ZQwbI5TbaWs63rAAA4HwEVtiuYHTbt6ybGBYAAAAuIOAD\n",

"6549ezR9+nTl5ORoypQp2rVrl90loZd5btO6eXe13G7aWwEAAF+RdhdwOYsXL9aiRYtUWFioP/zh\n",

"DyosLNR7771nd1noRZMzkxQXHaFjp5r1QcUJjU9NUKTDIYclWZZld3kAAljHHs7ntnM2F1nu/Hnn\n",

"rnfxbfruu/PrdbeWjjONzlmvm/s4d91zt3upl5c65vO3e+4+L13/peZ19tx69tP23YeRMW3z3ab9\n",

"uWl77tmOUduyxrTtwZiz63iW9SznWd/z3N2+jnyWO/tc3uV81/HZt1vn7PcCNXec375PT806b7mO\n",

"+/AcW8f6je+x6QLzjZQ1ZIC+MjX94n9BNgjowFpdXa0dO3bozTfflCTNmzdPS5YsUXl5ubKysmyu\n",

"Dr0lOtKha7JT9Mauo7r9Z+/4zIuKsBThsBTpcLT/aZ39M8J3emSEpQiHw3cZ758O7zIdX0dEdHI5\n",

"7/Y7sZzP8p1YzuHw1uGZFshB3fND0G2MXO6zP4Rdxsi4JZcxcnsebl34efs2XG7j/WHree7Zttvd\n",

"4blnevsyLvfZDxmX6fDcff76LmPaanYbuYynfiOX2/OD3ve5u8MPcnf7p4BR2759P/h8X3s+INs+\n",

"gM7/oPJ+eHTY7tl1z/+w7DhP57zu+MHpPmfb8j4//8Pw3ONym3OP6RLH1XE/53yQujvU0tmAdakw\n",

"c6lwBaDvFYweTGDtisrKSg0fPlyRkW1lWpal9PR0VVRUnBdYnU6nnE6nzzSXy+W3WtEzX5maruKy\n",

"Gjlb3T7TW1xGLS4jyX3hFUNURKdCd4fA3h6mLZ39n7frvJB4NvB5wqInbHhDXcfgeKHA6P3mAECw\n",

"6/j/4nP/i3zuf5otn3nnLHvu2pfc7sXXPX/exWs677/050xwWJYsq22y57lktf/mrm2/ltU2z7Nv\n",

"z2urfV+e9a32aWe30zat47YcbQu2L99xO2f35V3WcXbapWpt284563eoz3FOfb41d+G4O85vX+fK\n",

"wQPOPcO2C+jA2hXLly/X448/7jNt2rRpNlWDrioYPUS7Hr9RzS63Wt1GLpdp+9Nt1Op2t//Z9rrF\n",

"5fu61XX+cq2u89dr267b53Xbur7TOm6rxdVxurvDvs4u1+o6Zx8dt9dh+Va3+7zjutiQXVf7Ms3+\n",

"/WvoVZYlRViW94dmhKPtucOSHN7n7a8tzzfLZ5e76PqODutYZ3/4nru+Z5m2deS7v/ZlItrnWeds\n",

"69wf4o72TwHPh5B3mXNedxzG4jNNZ5f3fMg4HL4fMj4fcOdt9+L7O/th1D7PcaH9eT5QOxyD49L7\n",

"0wX2f8H9eWvr+MHZ4X1wTpK4VEhSN9e7VJC5VC0++7tEWOpueDt33sXqutx6na3l3HUD+Tc1QFdZ\n",

"JoBv4l5dXa2srCwdP35ckZGRMsZo+PDhevvttzv1Detjjz2m5557zp8lA13S9mvqjgH6nPB8geB9\n",

"XmDvEKbdxhPY5BPu2sJY+3OH7/OLhrrLhMiO63iW6xgi+bAEAPSWgP6GdciQIZo0aZLWrFmjwsJC\n",

"bdiwQampqRccvxoTE6OYmBifaREREf4qFegWh8OSQ5aieKsCAHBRAR1YJemFF15QYWGhnnrqKcXH\n",

"x2vVqlV2lwQAAAA/CvjAOnr0aL3zzjuXXxAAAAAhKeBvHAAAAIDwRmAFAABAQCOwAgAAIKARWAEA\n",

"ABDQCKwAAAAIaARWAAAABDQCKwAAAAIagRUAAAABjcAKAACAgGYZY4zdRfSV2267TZmZmX7Zl8vl\n",

"0vbt2zV16lRFRHBj+O7gHPYM56/nOIc9w/nrOc5hz3D+es6Oc5iRkaFvf/vbl1wmpAOrP9XX1ysh\n",

"IUEnT55UfHy83eUEJc5hz3D+eo5z2DOcv57jHPYM56/nAvUcMiQAAAAAAY3ACgAAgIBGYAUAAEBA\n",

"I7D2kpiYGP3bv/2bYmJi7C4laHEOe4bz13Ocw57h/PUc57BnOH89F6jnkIuuAAAAEND4hhUAAAAB\n",

"jcAKAACAgEZgBQAAQEAjsNro2WefVVVVld1lIMgdOHBAP/vZzy65zOTJk1VcXOyfgoLcp59+qmuv\n",

"vdbuMgLKmTNnNHfuXOXk5Cg3N1ezZs1SeXm5JCk/P18jR45UXl6e8vLytHLlSu96ixcv1vjx43X9\n",

"9dfr5MmTkiRjjObMmaO9e/facix2yczM1OjRo73naf369ZKkPXv2aPr06crJydGUKVO0a9cuSVJL\n",

"S4vmzp2r3Nxc3XbbbWptbZXU9ndx3XXX6cSJE7Ydix1qa2u95y4vL085OTmKjIzU8ePHeQ+GCQKr\n",

"jQis6A2dCazovBEjRmjr1q12lxFwFi1apLKyMn344Ye69dZbtXDhQu+8lStXqqSkRCUlJfqnf/on\n",

"SdLHH3+sPXv26KOPPlJ+fr5+85vfSJL++7//WwUFBbryyittOQ47rV+/3nue5s+fL6ktUC1atEi7\n",

"d+/WsmXLVFhYKEl64403lJSUpA8//FCJiYl6/fXXJUnf//73tWTJEg0aNMiuw7BFcnKy99yVlJRo\n",

"0aJFmjNnjpKSkiTxHgwHBNYLeOedd3TNNdcoNzdXEyZM0J/+9Cft2LFD06dP14QJEzR16lRt27ZN\n",

"UltYSExM9K576tQpWZblfW1Zlp566ilNnTpVI0eO1KpVqyRJTzzxhD799FPNnz9feXl5Kikp8ech\n",

"9inLsvTkk0/q6quvVmZmpl5++WUtX75ckydPVnZ2ts83fW+88YauueYaXXXVVZo6dao2bdokSaqq\n",

"qlJBQYGuuuoqjR07VkuWLJHb7ZYkrV69WjNnztRXv/pVjR8/XpMnT9a+ffvsOFS/a2pq0vz58/XZ\n",

"z35Wubm5mj17tu6//36VlZUpLy9PX/rSlyRJ//u//6u8vDyNGzdO//iP/+j9diacdfZ9ee6/6Yv9\n",

"Gw4nsbGxuvnmm70/26ZNm6YDBw5ccp2oqCg5nU653W41NjYqOjpaR44c0bp167R06VI/VB34qqur\n",

"tWPHDt19992SpHnz5qmyslLl5eWKiorS6dOnJUmnT59WdHS0du7cqdLSUt1xxx12lh0QfvGLX+je\n",

"e++95DK8B8/q7M+/1tZW3XjjjZo8ebLGjh2rO++8U42NjZKk3/72t5o8ebKcTqeMMfriF7+oJ598\n",

"0n8HYeCjtrbWDBkyxGzZssUYY4zL5TJHjx41aWlp5vXXXzfGGLN161YzdOhQ09DQYPbv328SEhK8\n",

"6zc0NJiOp1WSeeaZZ4wxxvz97383AwYMMC0tLcYYYzIyMsz//d//+efA/EiSefbZZ40xxrz11lsm\n",

"Li7OrFq1yhhjzIsvvmgmT55sjDFm7969Ztq0aebkyZPGGGP27Nljhg0bZs6cOWOamppMQ0ODMcaY\n",

"1tZWc8stt5h169YZY4xZtWqViY+PN/v27TPGGLNs2TKzaNEifx6ibV566SUze/Zs7+va2lqzadMm\n",

"k5ub653mdDpNamqqKSoqMsYY88YbbxhJZtOmTX6uNrB09n157r/pS/0bDld33323efDBB40xxsyY\n",

"McOMHj3ajBs3ztxxxx1m79693uW+973vmdzcXHP77bebxsZGM3/+fLNjxw67yrZVRkaGGT9+vBk3\n",

"bpz5+te/bqqrq82OHTtMTk6Oz3JTpkwxf/3rX43L5TILFy40EyZMMIsWLTItLS3mhhtuMJWVlTYd\n",

"QeDYtm2bGTp0qPffIe/By+vszz+3222OHTvmfX7//feb5cuXe7ezaNEi881vftP88Ic/NDfddJNx\n",

"u93+Owa/7SlI/M///I+59tprfabt3LnTZGRk+EybMGGC2bp1a6cC65EjR7yvExMTvT9wQjmweo65\n",

"rq7OSDJNTU3GGGMOHDjgPV8//vGPTUpKisnNzfU+RowYYXbv3m0aGxvNAw88YCZMmGDGjx9vhg4d\n",

"apYtW2aMaQusN954o3d/L7/8srnhhhv8e5A22bt3r0lLSzPf+MY3zO9+9ztTX19/XmD98MMPTWZm\n",

"ps96o0aNIrB28n15ocB6sX/D4ejJJ58006ZNM42NjcYYYyoqKowxbR9uzz//vPnMZz5zwfVefvll\n",

"853vfMccO3bMFBYWmttuu8387ne/81vddjt48KAxxpjm5mbz3e9+18yZM+eSgfVcK1euNM8//7zZ\n",

"v3+/+epXv2puu+22Cy4XDr7+9a+bf/7nf/a+5j14eZ39+edyucz3vvc9k5eXZ8aNG2fS0tLM/Pnz\n",

"vdtpamoyEyZMMGlpaaampsavx8CQgG7y/GosMjJSLpfLO/3MmTPnLRsbG+t9HhERERa/nvUcc0RE\n",

"xHmvPcdvjNGsWbN8xiUdPnxY2dnZWrFihaqrq/W3v/1NO3fu1J133ulzbsPxnErSqFGj9Mknn+im\n",

"m27Stm3bNG7cuE5dfNFxmEo468z78lLrdWbZUPbMM8/opZde0muvvab+/ftLktLS0iS1vceWLFmi\n",

"ffv2qba21me9+vp6PfPMM3r88cf17LPPasaMGVq/fr2eeOIJNTU1+f047JCeni6p7dfUDz30kLZu\n",

"3aq0tDQdOXLE52diRUWFd1mPgwcP6i9/+YseeOABPfbYY1q0aJFWr16tb33rW34/DrudOnVKL774\n",

"or7+9a97p/Ee7JzO/Pxbu3atNm7cqM2bN+ujjz7Sd77zHZ/P3urqap04cUJut1t1dXV+rZ/Aeo7p\n",

"06drz5493osu3G63hg4dKrfbraKiIklt4wOrqqqUl5enYcOGyRijTz75RJL061//utP7io+P9161\n",

"GI5uvPFGvfXWW9q5c6d32vbt2yVJJ06c0LBhwxQbG6uqqir9/ve/t6vMgHLo0CFZlqUvfelLeuaZ\n",

"Z2SMUXJyss/7aMyYMWptbfWOB37rrbe4GhY9tmLFCq1bt05FRUXeMb6tra06evSod5kNGzZo6NCh\n",

"Sk5O9ln3kUce0f/7f/9P/fv3V2NjoyzLkmVZamlpUXNzsz8PwxaNjY0+H+7r1q3TxIkTNWTIEE2a\n",

"NElr1qyR1Hb+UlNTlZWV5bP+t7/9ba1cuVIOh8N7/jzPw8369euVm5urMWPGSOI92NtOnDihlJQU\n",

"xcfHq6GhQatXr/bOa21t1Ve+8hV9//vf14oVK3THHXfI6XT6rbZIv+0pSAwaNEh//OMf9fDDD6uh\n",

"oUEOh0Pf//739dJLL+nBBx/Uww8/rNjYWP3hD3/QgAEDJEnPP/+8vvCFLyg5OVm33357p/f14IMP\n",

"6r777lP//v21evVq5eXl9dFRBaasrCytXbtWixcv1unTp9Xc3KyJEydq7dq1+va3v63bb79dY8eO\n",

"1YgRIzRz5ky7yw0IH330kR599FEZY9Ta2qoFCxZo+vTpGjt2rMaNG6dRo0bplVde0fr16/XAAw/I\n",

"5XJpypQpys3Ntbt0BLFDhw7p4Ycf1qhRo1RQUCCp7X7jGzdu1C233CKn0ymHw6GUlBS98sorPutu\n",

"27ZNTU1NmjVrliTpm9/8pr761a/q6aef1oIFC5SQkOD34/G3o0ePat68eXK5XDLGaNSoUd4vN154\n",

"4QUVFhbqqaeeUnx8/HkX9a1du1a5ubkaO3aspLbgdd9996m5uVmPPfaY34/Fbr/4xS903333eV87\n",

"nU7eg73onnvu0Z/+9CeNHj1agwcP1rXXXquDBw9KanvvjR49Wl/72tckSZs3b9ZDDz2kn/70p36p\n",

"zTLGGL/sCQAAAOgGhgQAAAAgoBFYAQAAENAIrAAAAAhoBFYAAAAENAIrAAAAAhqBFQAAAAGNwAoA\n",

"AICARmAFAABAQCOwAgAAIKARWAEAABDQCKwAAAAIaP8fDScnwOZBOW4AAAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-917d73ef-0139-42eb-acea-b53ee4e3775c\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-917d73ef-0139-42eb-acea-b53ee4e3775c\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

}

]

},

{

"cell\_type": "code",

"source": [

"data.mean()"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "LzZ-XqStJdjt",

"outputId": "c0edd1f2-a39d-4d1c-95b0-60b5462badf8"

},

"execution\_count": 7,

"outputs": [

{

"output\_type": "execute\_result",

"data": {

"text/plain": [

"Index 12500.500000\n",

"Height(Inches) 67.993114\n",

"Weight(Pounds) 127.079421\n",

"dtype: float64"

]

},

"metadata": {},

"execution\_count": 7

}

]

},

{

"cell\_type": "code",

"source": [

"data.median()"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "nmB5g6ChJgQ0",

"outputId": "8571d778-724e-4acb-e759-8ccc594ebf10"

},

"execution\_count": 8,

"outputs": [

{

"output\_type": "execute\_result",

"data": {

"text/plain": [

"Index 12500.50000\n",

"Height(Inches) 67.99570\n",

"Weight(Pounds) 127.15775\n",

"dtype: float64"

]

},

"metadata": {},

"execution\_count": 8

}

]

},

{

"cell\_type": "code",

"source": [

"data.std()"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "kXpTb09bJiq-",

"outputId": "767444ea-9330-41fc-9c52-5fadbeedb23d"

},

"execution\_count": 9,

"outputs": [

{

"output\_type": "execute\_result",

"data": {

"text/plain": [

"Index 7217.022701\n",

"Height(Inches) 1.901679\n",

"Weight(Pounds) 11.660898\n",

"dtype: float64"

]

},

"metadata": {},

"execution\_count": 9

}

]

},

{

"cell\_type": "code",

"source": [

"# Define the ranges for variables\n",

"variable1\_range = range(1, 11) # Range from 1 to 10\n",

"variable2\_range = range(5, 21, 2) # Range from 5 to 20 with step 2\n",

"\n",

"# Iterate through each combination of variables\n",

"for var1 in variable1\_range:\n",

" for var2 in variable2\_range:\n",

" # Your code using var1 and var2\n",

" print(f\"Variable 1: {var1}, Variable 2: {var2}\")\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "gN1dIRGBKCBu",

"outputId": "f42717c8-7fd7-4d18-fd6a-bc96f768be90"

},

"execution\_count": 10,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"Variable 1: 1, Variable 2: 5\n",

"Variable 1: 1, Variable 2: 7\n",

"Variable 1: 1, Variable 2: 9\n",

"Variable 1: 1, Variable 2: 11\n",

"Variable 1: 1, Variable 2: 13\n",

"Variable 1: 1, Variable 2: 15\n",

"Variable 1: 1, Variable 2: 17\n",

"Variable 1: 1, Variable 2: 19\n",

"Variable 1: 2, Variable 2: 5\n",

"Variable 1: 2, Variable 2: 7\n",

"Variable 1: 2, Variable 2: 9\n",

"Variable 1: 2, Variable 2: 11\n",

"Variable 1: 2, Variable 2: 13\n",

"Variable 1: 2, Variable 2: 15\n",

"Variable 1: 2, Variable 2: 17\n",

"Variable 1: 2, Variable 2: 19\n",

"Variable 1: 3, Variable 2: 5\n",

"Variable 1: 3, Variable 2: 7\n",

"Variable 1: 3, Variable 2: 9\n",

"Variable 1: 3, Variable 2: 11\n",

"Variable 1: 3, Variable 2: 13\n",

"Variable 1: 3, Variable 2: 15\n",

"Variable 1: 3, Variable 2: 17\n",

"Variable 1: 3, Variable 2: 19\n",

"Variable 1: 4, Variable 2: 5\n",

"Variable 1: 4, Variable 2: 7\n",

"Variable 1: 4, Variable 2: 9\n",

"Variable 1: 4, Variable 2: 11\n",

"Variable 1: 4, Variable 2: 13\n",

"Variable 1: 4, Variable 2: 15\n",

"Variable 1: 4, Variable 2: 17\n",

"Variable 1: 4, Variable 2: 19\n",

"Variable 1: 5, Variable 2: 5\n",

"Variable 1: 5, Variable 2: 7\n",

"Variable 1: 5, Variable 2: 9\n",

"Variable 1: 5, Variable 2: 11\n",

"Variable 1: 5, Variable 2: 13\n",

"Variable 1: 5, Variable 2: 15\n",

"Variable 1: 5, Variable 2: 17\n",

"Variable 1: 5, Variable 2: 19\n",

"Variable 1: 6, Variable 2: 5\n",

"Variable 1: 6, Variable 2: 7\n",

"Variable 1: 6, Variable 2: 9\n",

"Variable 1: 6, Variable 2: 11\n",

"Variable 1: 6, Variable 2: 13\n",

"Variable 1: 6, Variable 2: 15\n",

"Variable 1: 6, Variable 2: 17\n",

"Variable 1: 6, Variable 2: 19\n",

"Variable 1: 7, Variable 2: 5\n",

"Variable 1: 7, Variable 2: 7\n",

"Variable 1: 7, Variable 2: 9\n",

"Variable 1: 7, Variable 2: 11\n",

"Variable 1: 7, Variable 2: 13\n",

"Variable 1: 7, Variable 2: 15\n",

"Variable 1: 7, Variable 2: 17\n",

"Variable 1: 7, Variable 2: 19\n",

"Variable 1: 8, Variable 2: 5\n",

"Variable 1: 8, Variable 2: 7\n",

"Variable 1: 8, Variable 2: 9\n",

"Variable 1: 8, Variable 2: 11\n",

"Variable 1: 8, Variable 2: 13\n",

"Variable 1: 8, Variable 2: 15\n",

"Variable 1: 8, Variable 2: 17\n",

"Variable 1: 8, Variable 2: 19\n",

"Variable 1: 9, Variable 2: 5\n",

"Variable 1: 9, Variable 2: 7\n",

"Variable 1: 9, Variable 2: 9\n",

"Variable 1: 9, Variable 2: 11\n",

"Variable 1: 9, Variable 2: 13\n",

"Variable 1: 9, Variable 2: 15\n",

"Variable 1: 9, Variable 2: 17\n",

"Variable 1: 9, Variable 2: 19\n",

"Variable 1: 10, Variable 2: 5\n",

"Variable 1: 10, Variable 2: 7\n",

"Variable 1: 10, Variable 2: 9\n",

"Variable 1: 10, Variable 2: 11\n",

"Variable 1: 10, Variable 2: 13\n",

"Variable 1: 10, Variable 2: 15\n",

"Variable 1: 10, Variable 2: 17\n",

"Variable 1: 10, Variable 2: 19\n"

]

}

]

},

{

"cell\_type": "markdown",

"source": [

"\*\*PROBABLIITY\*\*"

],

"metadata": {

"id": "FknK4Z\_6KtX9"

}

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"\n",

"# Generate sample heights data (you can replace this with your dataset)\n",

"np.random.seed(0) # for reproducibility\n",

"heights = np.random.normal(loc=170, scale=10, size=1000) # mean=170, std=10, 1000 samples\n",

"\n",

"# Define a function to calculate the probability of a person being taller than a certain height\n",

"def probability\_taller\_than(height\_data, threshold\_height):\n",

" taller\_count = sum(height > threshold\_height for height in height\_data)\n",

" total\_count = len(height\_data)\n",

" probability = taller\_count / total\_count\n",

" return probability\n",

"\n",

"# Define a threshold height\n",

"threshold = 180 # Change this to your desired threshold height\n",

"\n",

"# Calculate the probability of a person being taller than the threshold height\n",

"prob\_taller\_than\_threshold = probability\_taller\_than(heights, threshold)\n",

"\n",

"# Print the result\n",

"print(f\"The probability of a person being taller than {threshold} cm is: {prob\_taller\_than\_threshold:.2f}\")\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "1EjZr3PSKw58",

"outputId": "3ea1d201-d6b1-4052-b4db-dc608335b4aa"

},

"execution\_count": 11,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"The probability of a person being taller than 180 cm is: 0.14\n"

]

}

]

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"\n",

"# Generate sample dataset of heights (in cm)\n",

"np.random.seed(0) # for reproducibility\n",

"heights = np.random.normal(loc=170, scale=10, size=1000) # mean=170, std=10, 1000 samples\n",

"\n",

"# Define the event: Person being taller than 170 cm\n",

"threshold\_height = 170\n",

"\n",

"# Calculate the probability of the defined event\n",

"prob\_taller\_than\_threshold = np.mean(heights > threshold\_height)\n",

"\n",

"# Print the probability\n",

"print(\"Probability of a person being taller than\", threshold\_height, \"cm:\", prob\_taller\_than\_threshold)\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "GqYzV5V8Ln5H",

"outputId": "817346df-4586-4e1a-f75b-4dabbb5c39b1"

},

"execution\_count": 12,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"Probability of a person being taller than 170 cm: 0.476\n"

]

}

]

},

{

"cell\_type": "markdown",

"source": [

"\*\*DISTRIBUTIONS\*\*"

],

"metadata": {

"id": "DGlXf33iMvGV"

}

},

{

"cell\_type": "code",

"source": [

"import matplotlib.pyplot as plt\n",

"\n",

"# Plot histogram for heights\n",

"plt.figure(figsize=(8, 6))\n",

"plt.hist(heights, bins=30, color='skyblue', edgecolor='black')\n",

"plt.title('Height Distribution')\n",

"plt.xlabel('Height (cm)')\n",

"plt.ylabel('Frequency')\n",

"plt.grid(True)\n",

"plt.show()\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/",

"height": 564

},

"id": "gy9hYx6sM7tQ",

"outputId": "720c3134-3a8a-4e62-c2bd-3f2203c2d8fc"

},

"execution\_count": 13,

"outputs": [

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<Figure size 800x600 with 1 Axes>"

],

"image/png": "\n"

},

"metadata": {}

}

]

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"import matplotlib.pyplot as plt\n",

"\n",

"# Generate sample dataset of weights (in kg)\n",

"np.random.seed(0) # for reproducibility\n",

"weights = np.random.normal(loc=70, scale=10, size=1000) # mean=70, std=10, 1000 samples\n",

"\n",

"# Plot histogram for weights\n",

"plt.figure(figsize=(8, 6))\n",

"plt.hist(weights, bins=30, color='blue', alpha=0.7)\n",

"plt.title('Histogram of Weights')\n",

"plt.xlabel('Weight (kg)')\n",

"plt.ylabel('Frequency')\n",

"plt.grid(True)\n",

"plt.show()\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/",

"height": 564

},

"id": "OtnqVpfsNddF",

"outputId": "32ebf216-4a68-4627-a558-63d1d79a0bf4"

},

"execution\_count": 14,

"outputs": [

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<Figure size 800x600 with 1 Axes>"

],

"image/png": "\n"

},

"metadata": {}

}

]

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"import matplotlib.pyplot as plt\n",

"\n",

"# Generate sample dataset of heights and weights\n",

"np.random.seed(0) # for reproducibility\n",

"heights = np.random.normal(loc=170, scale=10, size=1000) # heights in cm\n",

"weights = np.random.normal(loc=70, scale=15, size=1000) # weights in kg\n",

"\n",

"# Plot histograms for heights and weights\n",

"plt.figure(figsize=(10, 5))\n",

"\n",

"# Histogram for heights\n",

"plt.subplot(1, 2, 1)\n",

"plt.hist(heights, bins=30, color='skyblue', edgecolor='black')\n",

"plt.title('Height Distribution')\n",

"plt.xlabel('Height (cm)')\n",

"plt.ylabel('Frequency')\n",

"\n",

"# Histogram for weights\n",

"plt.subplot(1, 2, 2)\n",

"plt.hist(weights, bins=30, color='salmon', edgecolor='black')\n",

"plt.title('Weight Distribution')\n",

"plt.xlabel('Weight (kg)')\n",

"plt.ylabel('Frequency')\n",

"\n",

"plt.tight\_layout()\n",

"plt.show()\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/",

"height": 507

},

"id": "ezPfAETkOCuH",

"outputId": "d078c44e-ad09-437b-f4c1-79101c8c8a68"

},

"execution\_count": 15,

"outputs": [

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<Figure size 1000x500 with 2 Axes>"

],

"image/png": "\n"

},

"metadata": {}

}

]

},

{

"cell\_type": "markdown",

"source": [

"\*\*INFERENTIAL STATISTICS-CENTRAL LIMIT THEOREM(CLT)\*\*"

],

"metadata": {

"id": "r5j5sROtOba7"

}

},

{

"cell\_type": "code",

"source": [

"data.sample(30)"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/",

"height": 1000

},

"id": "lRGG03ruOnq4",

"outputId": "f9e8c702-1998-4e9b-989c-8110fda0b6bc"

},

"execution\_count": 16,

"outputs": [

{

"output\_type": "execute\_result",

"data": {

"text/plain": [

" Index Height(Inches) Weight(Pounds)\n",

"24349 24350 67.93692 130.9467\n",

"10429 10430 67.36794 131.8412\n",

"2612 2613 69.66995 137.9075\n",

"15990 15991 65.07498 105.2216\n",

"11949 11950 69.40879 142.2191\n",

"1499 1500 69.57300 138.6461\n",

"1412 1413 67.34824 134.8916\n",

"12130 12131 69.03417 148.2146\n",

"4029 4030 66.14103 131.9355\n",

"1730 1731 67.52718 127.9032\n",

"19524 19525 67.06971 130.6626\n",

"17476 17477 70.88868 142.4583\n",

"4532 4533 69.67469 118.0784\n",

"6817 6818 65.53683 122.7073\n",

"11260 11261 68.73884 133.8346\n",

"21689 21690 65.38827 125.2450\n",

"13417 13418 70.04237 120.8985\n",

"19170 19171 64.52474 113.2789\n",

"6610 6611 69.62402 119.3894\n",

"10913 10914 69.59921 141.6018\n",

"9586 9587 68.40503 151.6563\n",

"9862 9863 64.47165 110.3828\n",

"7353 7354 67.52712 126.3744\n",

"5231 5232 69.96297 131.0290\n",

"20753 20754 66.35603 124.8582\n",

"5806 5807 70.25624 130.8484\n",

"9712 9713 67.00457 139.3125\n",

"14885 14886 72.17516 134.4131\n",

"3001 3002 70.63103 145.4599\n",

"23279 23280 67.99061 129.6754"

],

"text/html": [

"\n",

" <div id=\"df-c3565b11-ce26-4b0d-bf5c-205bb4541ae7\" class=\"colab-df-container\">\n",

" <div>\n",

"<style scoped>\n",

" .dataframe tbody tr th:only-of-type {\n",

" vertical-align: middle;\n",

" }\n",

"\n",

" .dataframe tbody tr th {\n",

" vertical-align: top;\n",

" }\n",

"\n",

" .dataframe thead th {\n",

" text-align: right;\n",

" }\n",

"</style>\n",

"<table border=\"1\" class=\"dataframe\">\n",

" <thead>\n",

" <tr style=\"text-align: right;\">\n",

" <th></th>\n",

" <th>Index</th>\n",

" <th>Height(Inches)</th>\n",

" <th>Weight(Pounds)</th>\n",

" </tr>\n",

" </thead>\n",

" <tbody>\n",

" <tr>\n",

" <th>24349</th>\n",

" <td>24350</td>\n",

" <td>67.93692</td>\n",

" <td>130.9467</td>\n",

" </tr>\n",

" <tr>\n",

" <th>10429</th>\n",

" <td>10430</td>\n",

" <td>67.36794</td>\n",

" <td>131.8412</td>\n",

" </tr>\n",

" <tr>\n",

" <th>2612</th>\n",

" <td>2613</td>\n",

" <td>69.66995</td>\n",

" <td>137.9075</td>\n",

" </tr>\n",

" <tr>\n",

" <th>15990</th>\n",

" <td>15991</td>\n",

" <td>65.07498</td>\n",

" <td>105.2216</td>\n",

" </tr>\n",

" <tr>\n",

" <th>11949</th>\n",

" <td>11950</td>\n",

" <td>69.40879</td>\n",

" <td>142.2191</td>\n",

" </tr>\n",

" <tr>\n",

" <th>1499</th>\n",

" <td>1500</td>\n",

" <td>69.57300</td>\n",

" <td>138.6461</td>\n",

" </tr>\n",

" <tr>\n",

" <th>1412</th>\n",

" <td>1413</td>\n",

" <td>67.34824</td>\n",

" <td>134.8916</td>\n",

" </tr>\n",

" <tr>\n",

" <th>12130</th>\n",

" <td>12131</td>\n",

" <td>69.03417</td>\n",

" <td>148.2146</td>\n",

" </tr>\n",

" <tr>\n",

" <th>4029</th>\n",

" <td>4030</td>\n",

" <td>66.14103</td>\n",

" <td>131.9355</td>\n",

" </tr>\n",

" <tr>\n",

" <th>1730</th>\n",

" <td>1731</td>\n",

" <td>67.52718</td>\n",

" <td>127.9032</td>\n",

" </tr>\n",

" <tr>\n",

" <th>19524</th>\n",

" <td>19525</td>\n",

" <td>67.06971</td>\n",

" <td>130.6626</td>\n",

" </tr>\n",

" <tr>\n",

" <th>17476</th>\n",

" <td>17477</td>\n",

" <td>70.88868</td>\n",

" <td>142.4583</td>\n",

" </tr>\n",

" <tr>\n",

" <th>4532</th>\n",

" <td>4533</td>\n",

" <td>69.67469</td>\n",

" <td>118.0784</td>\n",

" </tr>\n",

" <tr>\n",

" <th>6817</th>\n",

" <td>6818</td>\n",

" <td>65.53683</td>\n",

" <td>122.7073</td>\n",

" </tr>\n",

" <tr>\n",

" <th>11260</th>\n",

" <td>11261</td>\n",

" <td>68.73884</td>\n",

" <td>133.8346</td>\n",

" </tr>\n",

" <tr>\n",

" <th>21689</th>\n",

" <td>21690</td>\n",

" <td>65.38827</td>\n",

" <td>125.2450</td>\n",

" </tr>\n",

" <tr>\n",

" <th>13417</th>\n",

" <td>13418</td>\n",

" <td>70.04237</td>\n",

" <td>120.8985</td>\n",

" </tr>\n",

" <tr>\n",

" <th>19170</th>\n",

" <td>19171</td>\n",

" <td>64.52474</td>\n",

" <td>113.2789</td>\n",

" </tr>\n",

" <tr>\n",

" <th>6610</th>\n",

" <td>6611</td>\n",

" <td>69.62402</td>\n",

" <td>119.3894</td>\n",

" </tr>\n",

" <tr>\n",

" <th>10913</th>\n",

" <td>10914</td>\n",

" <td>69.59921</td>\n",

" <td>141.6018</td>\n",

" </tr>\n",

" <tr>\n",

" <th>9586</th>\n",

" <td>9587</td>\n",

" <td>68.40503</td>\n",

" <td>151.6563</td>\n",

" </tr>\n",

" <tr>\n",

" <th>9862</th>\n",

" <td>9863</td>\n",

" <td>64.47165</td>\n",

" <td>110.3828</td>\n",

" </tr>\n",

" <tr>\n",

" <th>7353</th>\n",

" <td>7354</td>\n",

" <td>67.52712</td>\n",

" <td>126.3744</td>\n",

" </tr>\n",

" <tr>\n",

" <th>5231</th>\n",

" <td>5232</td>\n",

" <td>69.96297</td>\n",

" <td>131.0290</td>\n",

" </tr>\n",

" <tr>\n",

" <th>20753</th>\n",

" <td>20754</td>\n",

" <td>66.35603</td>\n",

" <td>124.8582</td>\n",

" </tr>\n",

" <tr>\n",

" <th>5806</th>\n",

" <td>5807</td>\n",

" <td>70.25624</td>\n",

" <td>130.8484</td>\n",

" </tr>\n",

" <tr>\n",

" <th>9712</th>\n",

" <td>9713</td>\n",

" <td>67.00457</td>\n",

" <td>139.3125</td>\n",

" </tr>\n",

" <tr>\n",

" <th>14885</th>\n",

" <td>14886</td>\n",

" <td>72.17516</td>\n",

" <td>134.4131</td>\n",

" </tr>\n",

" <tr>\n",

" <th>3001</th>\n",

" <td>3002</td>\n",

" <td>70.63103</td>\n",

" <td>145.4599</td>\n",

" </tr>\n",

" <tr>\n",

" <th>23279</th>\n",

" <td>23280</td>\n",

" <td>67.99061</td>\n",

" <td>129.6754</td>\n",

" </tr>\n",

" </tbody>\n",

"</table>\n",

"</div>\n",

" <div class=\"colab-df-buttons\">\n",

"\n",

" <div class=\"colab-df-container\">\n",

" <button class=\"colab-df-convert\" onclick=\"convertToInteractive('df-c3565b11-ce26-4b0d-bf5c-205bb4541ae7')\"\n",

" title=\"Convert this dataframe to an interactive table.\"\n",

" style=\"display:none;\">\n",

"\n",

" <svg xmlns=\"http://www.w3.org/2000/svg\" height=\"24px\" viewBox=\"0 -960 960 960\">\n",

" <path d=\"M120-120v-720h720v720H120Zm60-500h600v-160H180v160Zm220 220h160v-160H400v160Zm0 220h160v-160H400v160ZM180-400h160v-160H180v160Zm440 0h160v-160H620v160ZM180-180h160v-160H180v160Zm440 0h160v-160H620v160Z\"/>\n",

" </svg>\n",

" </button>\n",

"\n",

" <style>\n",

" .colab-df-container {\n",

" display:flex;\n",

" gap: 12px;\n",

" }\n",

"\n",

" .colab-df-convert {\n",

" background-color: #E8F0FE;\n",

" border: none;\n",

" border-radius: 50%;\n",

" cursor: pointer;\n",

" display: none;\n",

" fill: #1967D2;\n",

" height: 32px;\n",

" padding: 0 0 0 0;\n",

" width: 32px;\n",

" }\n",

"\n",

" .colab-df-convert:hover {\n",

" background-color: #E2EBFA;\n",

" box-shadow: 0px 1px 2px rgba(60, 64, 67, 0.3), 0px 1px 3px 1px rgba(60, 64, 67, 0.15);\n",

" fill: #174EA6;\n",

" }\n",

"\n",

" .colab-df-buttons div {\n",

" margin-bottom: 4px;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-convert {\n",

" background-color: #3B4455;\n",

" fill: #D2E3FC;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-convert:hover {\n",

" background-color: #434B5C;\n",

" box-shadow: 0px 1px 3px 1px rgba(0, 0, 0, 0.15);\n",

" filter: drop-shadow(0px 1px 2px rgba(0, 0, 0, 0.3));\n",

" fill: #FFFFFF;\n",

" }\n",

" </style>\n",

"\n",

" <script>\n",

" const buttonEl =\n",

" document.querySelector('#df-c3565b11-ce26-4b0d-bf5c-205bb4541ae7 button.colab-df-convert');\n",

" buttonEl.style.display =\n",

" google.colab.kernel.accessAllowed ? 'block' : 'none';\n",

"\n",

" async function convertToInteractive(key) {\n",

" const element = document.querySelector('#df-c3565b11-ce26-4b0d-bf5c-205bb4541ae7');\n",

" const dataTable =\n",

" await google.colab.kernel.invokeFunction('convertToInteractive',\n",

" [key], {});\n",

" if (!dataTable) return;\n",

"\n",

" const docLinkHtml = 'Like what you see? Visit the ' +\n",

" '<a target=\"\_blank\" href=https://colab.research.google.com/notebooks/data\_table.ipynb>data table notebook</a>'\n",

" + ' to learn more about interactive tables.';\n",

" element.innerHTML = '';\n",

" dataTable['output\_type'] = 'display\_data';\n",

" await google.colab.output.renderOutput(dataTable, element);\n",

" const docLink = document.createElement('div');\n",

" docLink.innerHTML = docLinkHtml;\n",

" element.appendChild(docLink);\n",

" }\n",

" </script>\n",

" </div>\n",

"\n",

"\n",

"<div id=\"df-b9966c99-4c37-4298-962b-e1c3f8acd771\">\n",

" <button class=\"colab-df-quickchart\" onclick=\"quickchart('df-b9966c99-4c37-4298-962b-e1c3f8acd771')\"\n",

" title=\"Suggest charts\"\n",

" style=\"display:none;\">\n",

"\n",

"<svg xmlns=\"http://www.w3.org/2000/svg\" height=\"24px\"viewBox=\"0 0 24 24\"\n",

" width=\"24px\">\n",

" <g>\n",

" <path d=\"M19 3H5c-1.1 0-2 .9-2 2v14c0 1.1.9 2 2 2h14c1.1 0 2-.9 2-2V5c0-1.1-.9-2-2-2zM9 17H7v-7h2v7zm4 0h-2V7h2v10zm4 0h-2v-4h2v4z\"/>\n",

" </g>\n",

"</svg>\n",

" </button>\n",

"\n",

"<style>\n",

" .colab-df-quickchart {\n",

" --bg-color: #E8F0FE;\n",

" --fill-color: #1967D2;\n",

" --hover-bg-color: #E2EBFA;\n",

" --hover-fill-color: #174EA6;\n",

" --disabled-fill-color: #AAA;\n",

" --disabled-bg-color: #DDD;\n",

" }\n",

"\n",

" [theme=dark] .colab-df-quickchart {\n",

" --bg-color: #3B4455;\n",

" --fill-color: #D2E3FC;\n",

" --hover-bg-color: #434B5C;\n",

" --hover-fill-color: #FFFFFF;\n",

" --disabled-bg-color: #3B4455;\n",

" --disabled-fill-color: #666;\n",

" }\n",

"\n",

" .colab-df-quickchart {\n",

" background-color: var(--bg-color);\n",

" border: none;\n",

" border-radius: 50%;\n",

" cursor: pointer;\n",

" display: none;\n",

" fill: var(--fill-color);\n",

" height: 32px;\n",

" padding: 0;\n",

" width: 32px;\n",

" }\n",

"\n",

" .colab-df-quickchart:hover {\n",

" background-color: var(--hover-bg-color);\n",

" box-shadow: 0 1px 2px rgba(60, 64, 67, 0.3), 0 1px 3px 1px rgba(60, 64, 67, 0.15);\n",

" fill: var(--button-hover-fill-color);\n",

" }\n",

"\n",

" .colab-df-quickchart-complete:disabled,\n",

" .colab-df-quickchart-complete:disabled:hover {\n",

" background-color: var(--disabled-bg-color);\n",

" fill: var(--disabled-fill-color);\n",

" box-shadow: none;\n",

" }\n",

"\n",

" .colab-df-spinner {\n",

" border: 2px solid var(--fill-color);\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" animation:\n",

" spin 1s steps(1) infinite;\n",

" }\n",

"\n",

" @keyframes spin {\n",

" 0% {\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" border-left-color: var(--fill-color);\n",

" }\n",

" 20% {\n",

" border-color: transparent;\n",

" border-left-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" }\n",

" 30% {\n",

" border-color: transparent;\n",

" border-left-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" border-right-color: var(--fill-color);\n",

" }\n",

" 40% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" border-top-color: var(--fill-color);\n",

" }\n",

" 60% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" }\n",

" 80% {\n",

" border-color: transparent;\n",

" border-right-color: var(--fill-color);\n",

" border-bottom-color: var(--fill-color);\n",

" }\n",

" 90% {\n",

" border-color: transparent;\n",

" border-bottom-color: var(--fill-color);\n",

" }\n",

" }\n",

"</style>\n",

"\n",

" <script>\n",

" async function quickchart(key) {\n",

" const quickchartButtonEl =\n",

" document.querySelector('#' + key + ' button');\n",

" quickchartButtonEl.disabled = true; // To prevent multiple clicks.\n",

" quickchartButtonEl.classList.add('colab-df-spinner');\n",

" try {\n",

" const charts = await google.colab.kernel.invokeFunction(\n",

" 'suggestCharts', [key], {});\n",

" } catch (error) {\n",

" console.error('Error during call to suggestCharts:', error);\n",

" }\n",

" quickchartButtonEl.classList.remove('colab-df-spinner');\n",

" quickchartButtonEl.classList.add('colab-df-quickchart-complete');\n",

" }\n",

" (() => {\n",

" let quickchartButtonEl =\n",

" document.querySelector('#df-b9966c99-4c37-4298-962b-e1c3f8acd771 button');\n",

" quickchartButtonEl.style.display =\n",

" google.colab.kernel.accessAllowed ? 'block' : 'none';\n",

" })();\n",

" </script>\n",

"</div>\n",

"\n",

" </div>\n",

" </div>\n"

],

"application/vnd.google.colaboratory.intrinsic+json": {

"type": "dataframe",

"summary": "{\n \"name\": \"data\",\n \"rows\": 30,\n \"fields\": [\n {\n \"column\": \"Index\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 6888,\n \"min\": 1413,\n \"max\": 24350,\n \"num\_unique\_values\": 30,\n \"samples\": [\n 14886,\n 21690,\n 5232\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n },\n {\n \"column\": \"Height(Inches)\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 2.0110460278385407,\n \"min\": 64.47165,\n \"max\": 72.17516,\n \"num\_unique\_values\": 30,\n \"samples\": [\n 72.17516,\n 65.38827,\n 69.96297\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n },\n {\n \"column\": \"Weight(Pounds)\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 10.971916257714982,\n \"min\": 105.2216,\n \"max\": 151.6563,\n \"num\_unique\_values\": 30,\n \"samples\": [\n 134.4131,\n 125.245,\n 131.029\n ],\n \"semantic\_type\": \"\",\n \"description\": \"\"\n }\n }\n ]\n}"

}

},

"metadata": {},

"execution\_count": 16

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x786710dd8250>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">Distributions</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_30['Index'].plot(kind='hist', bins=20, title='Index')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-dcc1edee-7698-4520-a0e9-b72b42b807e8\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAiZklEQVR4nO3df1BVdf7H8dcV6qauQKKmhkDKD9sV+WESo1m2M5a6DRrqrO42\n",

"ockPNcca28mYsoJccWdbN7fGRcN1S2cpV8QcXGtsVzdqK20R7Zcl6g0oFMcSrJD4cb5/+O3WXUC9\n",

"yOHywedj5sxw7zkc35cDznPuPfceh2VZlgAAAAzUy9cDAAAAdBQhAwAAjEXIAAAAYxEyAADAWIQM\n",

"AAAwFiEDAACMRcgAAABjETIAAMBYhAwAADAWIQOg27rnnns0d+5cX48BoBsjZADYZuLEiXrsscd8\n",

"PQaAHoyQAQAAxiJkAHSJ8PBw5eTkaOrUqerXr59GjBihoqIij21+//vfKzQ0VEFBQUpLS9N3333n\n",

"sf7MmTNauHChwsLCFBwcrKlTp+rYsWOSpI8//lgBAQF65ZVX3NsvXLhQN910kxoaGux/gAB8gpAB\n",

"0GXy8/O1YsUK1dbW6v7771dqaqrq6uokSX/729+0cuVKvfTSSzp16pQSExM9QseyLN19992qq6vT\n",

"gQMH9MUXXygmJkZ33XWXGhsbdeONN2rDhg1KTU1VeXm5Nm3apC1btmjr1q1yOp2+esgAbEbIAOgy\n",

"aWlpSkhIUK9evZSZmamzZ8/q448/liRt3LhR9913n8aNG6errrpKGRkZGj16tPt7Dxw4oLfeekvr\n",

"1q1T//795XQ6tXLlSh0/flzvvvuuJGnWrFmaP3++7rrrLi1atEibN29WeHi4Lx4qgC5CyADoMkOH\n",

"DnV/3bdvX0nS2bNnJUlVVVW64YYbPLb/8e0jR46oqalJISEhCgoKUlBQkIKDgyVJlZWV7u0eeOAB\n",

"lZeXKyYmRlOmTLHtsQDoHggZAN1CSEiIXC6Xx30/vj148GBdffXVOnXqlM6cOeNe6uvrNWfOHElS\n",

"Y2Oj5syZoxkzZsjlcum5557rwkcAwBcIGQDdQmpqqv7yl7/onXfeUVNTk/Lz83Xw4EH3+ltuuUWj\n",

"Ro3SwoULVVNTI0n66quvVFhYqG+//VaS9Jvf/Eb19fV64YUX9PLLL2vZsmXul50A9EyEDIBu4de/\n",

"/rUefvhhzZo1SwMGDNA777yju+++273ez89Pu3fvVp8+fXTzzTerX79+io2NVVFRkRwOh1566SVt\n",

"3rxZhYWFuuaaazRhwgTl5ORo5syZOnXqlA8fGQA7OSzLsnw9BAAAQEfwjAwAADAWIQMAAIxFyAAA\n",

"AGMRMgAAwFiEDAAAMBYhAwAAjEXIAAAAY/WIkFmzZo2vRwAAAD7QI0Lms88+8/UIAADAB3pEyAAA\n",

"gCsTIQMAAIxFyAAAAGMRMgAAwFiEDAAAMBYhAwAAjEXIAAAAYxEyAADAWIQMAAAwFiEDAACMRcgA\n",

"AABjETIAAMBYXRIyGzdulMPh0Pbt29tcX1xcrJEjRyoyMlIpKSmqq6vrirEAAIDhbA8Zl8ul559/\n",

"XklJSW2u//rrrzV//nxt375dR44c0dChQ/XUU0/ZPRYAAOgBbA2ZlpYWpaWl6dlnn5XT6Wxzm127\n",

"dik+Pl4jR46UJC1atEgFBQXt7rOhoUF1dXUeS3Nzsy3zAwCA7s3fzp2vXr1a48eP15gxY9rdpqKi\n",

"QmFhYe7b4eHhqq6uVlNTk/z9W4+Xm5ur7Oxsj/vae7YHMFH4Iztt27dr1S9s2zcA+IJtz8h88MEH\n",

"Kiws1GOPPdap+83KylJtba3HkpiY2Kn/BgAAMINtz8iUlJTI5XIpMjJSknTixAllZGSourpaCxcu\n",

"dG8XGhqq3bt3u2+7XC4NGTKkzWdjJMnpdLZ6mcrPz8+GRwAAALo7256RWbhwoaqrq+VyueRyuZSU\n",

"lKT169d7RIwkTZ48WaWlpTp8+LAkae3atZo9e7ZdYwEAgB7E1nNk2vP4449r6NChWrBggfr166f8\n",

"/HxNnz5dTU1NGjVqlF544QVfjAUAAAzTZSGzd+9e99c5OTke65KTk5WcnNxVowAAgB6CT/YFAADG\n",

"ImQAAICxCBkAAGAsQgYAABiLkAEAAMYiZAAAgLEIGQAAYCxCBgAAGIuQAQAAxiJkAACAsQgZAABg\n",

"LEIGAAAYi5ABAADGImQAAICxCBkAAGAsQgYAABiLkAEAAMYiZAAAgLEIGQAAYCxCBgAAGIuQAQAA\n",

"xiJkAACAsQgZAABgLEIGAAAYi5ABAADGImQAAICxCBkAAGAsQgYAABiLkAEAAMYiZAAAgLEIGQAA\n",

"YCxCBgAAGIuQAQAAxiJkAACAsQgZAABgLFtD5o477tDo0aMVFxenCRMm6MCBA6222bt3r3r37q24\n",

"uDj3Ul9fb+dYAACgh/C3c+dbtmxRUFCQJKmoqEhz587VwYMHW20XHR2tsrIyO0cBAAA9kK0h833E\n",

"SFJtba0cDsdl77OhoUENDQ0e9zU3N1/2fgEAgHlsP0fm3nvv1bBhw7R8+XJt2rSpzW2OHj2qhIQE\n",

"jR07VmvXrr3g/nJzcxUYGOix7Nu3z47RAQBAN2d7yLz44ouqrKzUihUrtGzZslbrExISVFVVpdLS\n",

"UhUVFSkvL09btmxpd39ZWVmqra31WBITE+18CAAAoJvqsnctpaamas+ePTp9+rTH/QEBAQoMDJQk\n",

"hYSEaM6cOSopKWl3P06nUwEBAR6Ln5+frbMDAIDuybaQOXPmjL744gv37e3btys4OFj9+/f32K66\n",

"ulotLS2SpLNnz6q4uFjx8fF2jQUAAHoQ2072ra2t1axZs1RfX69evXpp4MCBKi4ulsPhUFpampKT\n",

"k5WcnKzCwkL9+c9/lr+/v5qamjRr1izNmzfPrrEAAEAP4rAsy/L1EJdr6dKlWr16ta/HADpF+CM7\n",

"bdu3a9UvbNs3APgCn+wLAACMRcgAAABjETIAAMBYhAwAADAWIQMAAIxFyAAAAGMRMgAAwFiEDAAA\n",

"MBYhAwAAjEXIAAAAYxEyAADAWIQMAAAwFiEDAACMRcgAAABjETIAAMBYhAwAADAWIQMAAIxFyAAA\n",

"AGMRMgAAwFiEDAAAMBYhAwAAjEXIAAAAYxEyAADAWIQMAAAwFiEDAACMRcgAAABjETIAAMBYhAwA\n",

"ADAWIQMAAIxFyAAAAGMRMgAAwFiEDAAAMBYhAwAAjEXIAAAAYxEyAADAWLaGzB133KHRo0crLi5O\n",

"EyZM0IEDB9rcbsOGDYqMjNSIESOUnp6uxsZGO8cCAAA9hK0hs2XLFh06dEhlZWVaunSp5s6d22qb\n",

"48ePa/ny5SopKVF5eblOnjyp9evX2zkWAADoIWwNmaCgIPfXtbW1cjgcrbbZunWrkpOTNXjwYDkc\n",

"Di1YsEAFBQXt7rOhoUF1dXUeS3Nzsx3jAwCAbs7f7n/g3nvv1Z49eyRJ//jHP1qtr6ioUFhYmPt2\n",

"eHi4Kioq2t1fbm6usrOzPe5LSkrqpGk9hT+y05b9SpJr1S9s2zcAAFcK20/2ffHFF1VZWakVK1Zo\n",

"2bJll72/rKws1dbWeiyJiYmdMCkAADBNl71rKTU1VXv27NHp06c97g8NDdVnn33mvu1yuRQaGtru\n",

"fpxOpwICAjwWPz8/2+YGAADdl20hc+bMGX3xxRfu29u3b1dwcLD69+/vsd2MGTO0Y8cOnThxQpZl\n",

"KS8vT7Nnz7ZrLAAA0IPYdo5MbW2tZs2apfr6evXq1UsDBw5UcXGxHA6H0tLSlJycrOTkZA0fPlzZ\n",

"2dkaP368JGnixInKzMy0aywAANCD2BYyYWFh2rdvX5vr8vPzPW6np6crPT3drlEAAEAPxSf7AgAA\n",

"YxEyAADAWIQMAAAwFiEDAACMRcgAAABjETIAAMBYhAwAADAWIQMAAIxFyAAAAGMRMgAAwFiEDAAA\n",

"MBYhAwAAjEXIAAAAYxEyAADAWIQMAAAwFiEDAACMRcgAAABjETIAAMBYhAwAADAWIQMAAIxFyAAA\n",

"AGMRMgAAwFiEDAAAMBYhAwAAjEXIAAAAYxEyAADAWIQMAAAwFiEDAACMRcgAAABjETIAAMBYhAwA\n",

"ADAWIQMAAIxFyAAAAGMRMgAAwFiEDAAAMJZtIXPu3DlNnz5dUVFRio2N1aRJk1ReXt5qO5fLJT8/\n",

"P8XFxbmXo0eP2jUWAADoQfzt3HlGRoamTJkih8Oh5557Tmlpadq7d2+r7fr166eysjI7RwEAAD2Q\n",

"bc/IXHPNNZo6daocDockKSkpSS6X67L329DQoLq6Oo+lubn5svcLAADM02XnyKxZs0bTpk1rc903\n",

"33yjsWPHKiEhQTk5ORcMk9zcXAUGBnos+/bts2tsAADQjXVJyKxcuVLl5eXKzc1ttW7IkCH6/PPP\n",

"tX//fr3++usqKSnRH/7wh3b3lZWVpdraWo8lMTHRzvEBAEA3ZXvIPP3009q2bZt27dqlPn36tFrv\n",

"dDo1aNAgSVL//v113333qaSkpN39OZ1OBQQEeCx+fn62zQ8AALovW0Nm9erVKigo0O7duxUUFNTm\n",

"NjU1NWpsbJR0/vyXbdu2KT4+3s6xAABAD2FbyFRVVemhhx7SmTNndPvttysuLk4333yzJOnxxx9X\n",

"Xl6eJOnNN99UfHy8YmNjlZCQoMGDB+vRRx+1aywAANCD2Pb265CQEFmW1ea6nJwc99cpKSlKSUmx\n",

"awwAANCD8cm+AADAWIQMAAAwFiEDAACMRcgAAABjeR0yr732mh1zAAAAeM3rkMnJyVF0dLTWrFmj\n",

"uro6O2YCAAC4JF6HzFtvvaWXXnpJH3zwgaKiorRo0SJ99NFHdswGAABwQR06RyY+Pl7PP/+8Xn31\n",

"VRUXF2v06NGaNGmS3n///c6eDwAAoF0dCpnXX39d06ZNU0pKiu6//36dOHFCmZmZuvvuuzt7PgAA\n",

"gHZ5/cm+N954owYMGKAlS5YoJSXFfcHGmTNnasOGDZ0+IAAAQHu8DpnNmzdrzJgxba7btWvXZQ8E\n",

"AABwqbx+aem///2vvvzyS/ft06dP6/nnn+/UoQAAAC6F1yGzdu1a9e/f3307ODhYa9eu7dShAAAA\n",

"LoXXIdPWFa2bm5s7ZRgAAABveB0yQ4YM0ZYtW9y3X375ZQ0ZMqRThwIAALgUXp/s+8wzz2jatGl6\n",

"+OGHJUl9+vTRK6+80umDAQAAXIzXITNy5Eh99NFH+uSTTyRJ0dHR7rdgAwAAdCWvQ0aSHA6HgoKC\n",

"1NTUpM8//1ySFBoa2qmDAQAAXIzXIfPXv/5VS5Ys0VVXXaVevc6fYuNwOFRTU9PpwwEAAFyI1yHz\n",

"1FNPaf/+/YqOjrZjHgAAgEvm9buWBgwYQMQAAIBuweuQmT59up555hnV1NSorq7OvQAAAHQ1r19a\n",

"evTRRyVJS5culcPhkGVZcjgcfCgeAADocl6HTEtLix1zAAAAeM3rl5ak8xeO3LRpkyTpzJkzqq6u\n",

"7tShAAAALkWHLhp533336cknn5R0/urXv/rVrzp7LgAAgIvyOmTWr1+vd955RwEBAZKkESNG6NSp\n",

"U50+GAAAwMV4HTJOp1O9e/f2uM/fv0MfEAwAAHBZvA6ZgQMH6tNPP5XD4ZB0/pN+uTwBAADwhQ5d\n",

"/XrOnDk6fPiwhg0bpoCAABUXF9sxGwAAwAV5HTIRERF699139cknn8iyLK5+DQAAfMbrkKmoqJAk\n",

"9e3bV5K4+jUAAPAZr0NmzJgx7k/0PXfunL799lsFBwdz9WsAANDlvA6Z/32r9bZt23Tw4MFOGwgA\n",

"AOBSdeiTfX8sJSVFO3fu7IxZAAAAvOJ1yPz4itdfffWVXn311Tavfn3u3DlNnz5dUVFRio2N1aRJ\n",

"k1ReXt7mPouLizVy5EhFRkYqJSWFq2kDAIBL4nXIBAUF6dprr1VQUJAGDRqkpUuX6k9/+lOb22Zk\n",

"ZOiTTz7RwYMHNW3aNKWlpbXa5uuvv9b8+fO1fft2HTlyREOHDtVTTz3l/SMBAABXHK9DpqWlRc3N\n",

"zWppaVFjY6M++ugjTZ48udV211xzjaZOner+4LykpCS5XK5W2+3atUvx8fEaOXKkJGnRokUqKCho\n",

"999vaGjweFaorq5Ozc3N3j4MAADQA3TZtQXWrFmjadOmtbq/oqJCYWFh7tvh4eGqrq5WU1NTm5c+\n",

"yM3NVXZ2tsd9SUlJnT+wzcIf4byiruBa9Qtfj9CtmPh7xzE0n12/d/xueLpSf85ePyPTq1cv+fn5\n",

"tVq+v78tK1euVHl5uXJzcy974KysLNXW1nosiYmJl71fAABgHq+fkcnJyVF9fb0WLlwoScrLy1Pv\n",

"3r314IMPtrn9008/rW3btun1119Xnz59Wq0PDQ3V7t273bddLpeGDBnS7oUonU6nnE6nx318sjAA\n",

"AFcmr5+RKSoq0m9/+1uFhIQoJCREK1as0LZt29S3b1/3p/1+b/Xq1SooKNDu3bsVFBTU5v4mT56s\n",

"0tJSHT58WJK0du1azZ492/tHAgAArjhePyNz9uxZ1dTUaNCgQZKkmpoanT17ttV2VVVVeuihhzR8\n",

"+HDdfvvtks4/m/Luu+/q8ccf19ChQ7VgwQL169dP+fn5mj59upqamjRq1Ci98MILl/mwAADAlcDr\n",

"kHnooYcUGxurqVOnSpJeffVVPfnkk622CwkJkWVZbe4jJyfH43ZycrKSk5O9HQUAAFzhvA6ZzMxM\n",

"jR8/Xnv27JEkLV26VD/72c86fTAAAICL6dDbr4ODgxUTE6OJEyeqqalJ3333na6++urOng0AAOCC\n",

"vD7Zd+vWrUpKStK8efMkSR9++KGmT5/e2XMBAABclNchk5ubq9LSUve7kGJjY/XZZ5919lwAAAAX\n",

"5XXI+Pn5KTg42OM+XlYCAAC+4HXI9OvXTydPnnRfQ+mf//yn+vfv3+mDAQAAXIzXJ/v+7ne/05Qp\n",

"U3Ts2DHdcsstOn78uHbuNO/6LQAAwHxehcz3V77es2eP/vOf/8iyLI0bN67dT+0FAACwk1ch06tX\n",

"L2VkZOjgwYOaMmWKXTMBAABcEq/PkYmMjFR5ebkdswAAAHjF63NkvvzyS8XFxWncuHH6yU9+4r5/\n",

"27ZtnToYAADAxVxyyGRkZGj9+vVKTU1VcnKyrr32WjvnAgAAuKhLDpn33ntPkpSamqqEhASVlpba\n",

"NhQAAMCl8PocGUntXtUaAACgK13yMzL19fV6//33ZVmWzp075/76e6NHj7ZlQAAAgPZ4FTLJycnu\n",

"2z/+2uFw6NixY507GQAAwEVccsi4XC4bxwAAAPBeh86RAQAA6A4IGQAAYCxCBgAAGIuQAQAAxiJk\n",

"AACAsQgZAABgLEIGAAAYi5ABAADGImQAAICxCBkAAGAsQgYAABiLkAEAAMYiZAAAgLEIGQAAYCxC\n",

"BgAAGIuQAQAAxiJkAACAsQgZAABgLFtDZsmSJQoPD5fD4VBZWVmb2+zdu1e9e/dWXFyce6mvr7dz\n",

"LAAA0EP427nzmTNn6uGHH9Ytt9xywe2io6PbDR0AAID22Boyt956a6fvs6GhQQ0NDR73NTc3d/q/\n",

"AwAAur9ucY7M0aNHlZCQoLFjx2rt2rUX3DY3N1eBgYEey759+7poUgAA0J34PGQSEhJUVVWl0tJS\n",

"FRUVKS8vT1u2bGl3+6ysLNXW1nosiYmJXTgxAADoLnweMgEBAQoMDJQkhYSEaM6cOSopKWl3e6fT\n",

"qYCAAI/Fz8+vq8YFAADdiM9Dprq6Wi0tLZKks2fPqri4WPHx8T6eCgAAmMDWkMnMzFRISIiqqqp0\n",

"5513KiIiQpKUlpamHTt2SJIKCwsVExOj2NhYJSUladKkSZo3b56dYwEAgB7C1nctrVu3rs378/Pz\n",

"3V8vXrxYixcvtnMMAADQQ/n8pSUAAICOImQAAICxCBkAAGAsQgYAABiLkAEAAMYiZAAAgLEIGQAA\n",

"YCxCBgAAGIuQAQAAxiJkAACAsQgZAABgLEIGAAAYi5ABAADGImQAAICxCBkAAGAsQgYAABiLkAEA\n",

"AMYiZAAAgLEIGQAAYCxCBgAAGIuQAQAAxiJkAACAsQgZAABgLEIGAAAYi5ABAADGImQAAICxCBkA\n",

"AGAsQgYAABiLkAEAAMYiZAAAgLEIGQAAYCxCBgAAGIuQAQAAxiJkAACAsQgZAABgLFtDZsmSJQoP\n",

"D5fD4VBZWVm7223YsEGRkZEaMWKE0tPT1djYaOdYAACgh7A1ZGbOnKk333xTYWFh7W5z/PhxLV++\n",

"XCUlJSovL9fJkye1fv16O8cCAAA9hK0hc+uttyokJOSC22zdulXJyckaPHiwHA6HFixYoIKCgna3\n",

"b2hoUF1dncfS3Nzc2aMDAAAD+Pt6gIqKCo9nbMLDw1VRUdHu9rm5ucrOzva4Lykpybb5YLbwR3ba\n",

"tm/Xql/Ytm/8wM5jaBo7f+dM/DmbODP/b3Q+4072zcrKUm1trceSmJjo67EAAIAP+PwZmdDQUB09\n",

"etR92+VyKTQ0tN3tnU6nnE6nx31+fn62zQcAALovnz8jM2PGDO3YsUMnTpyQZVnKy8vT7NmzfT0W\n",

"AAAwgK0hk5mZqZCQEFVVVenOO+9URESEJCktLU07duyQJA0fPlzZ2dkaP368IiIiNHDgQGVmZto5\n",

"FgAA6CFsfWlp3bp1bd6fn5/vcTs9PV3p6el2jgIAAHogn7+0BAAA0FGEDAAAMBYhAwAAjEXIAAAA\n",

"YxEyAADAWIQMAAAwFiEDAACMRcgAAABjETIAAMBYhAwAADAWIQMAAIxFyAAAAGMRMgAAwFiEDAAA\n",

"MBYhAwAAjEXIAAAAYxEyAADAWIQMAAAwFiEDAACMRcgAAABjETIAAMBYhAwAADAWIQMAAIxFyAAA\n",

"AGMRMgAAwFiEDAAAMBYhAwAAjEXIAAAAYxEyAADAWIQMAAAwFiEDAACMRcgAAABjETIAAMBYhAwA\n",

"ADAWIQMAAIxla8gcOXJE48aNU1RUlMaOHasPP/yw1TZ79+5V7969FRcX517q6+vtHAsAAPQQ/nbu\n",

"PDMzUxkZGZo7d662bt2quXPnav/+/a22i46OVllZmZ2jAACAHsi2Z2Rqamr03nvv6Z577pEkzZgx\n",

"Q5WVlSovL7+s/TY0NKiurs5jaW5u7oyRAQCAYWwLmcrKSg0ZMkT+/uef9HE4HAoNDVVFRUWrbY8e\n",

"PaqEhASNHTtWa9euveB+c3NzFRgY6LHs27fPlscAAAC6N5+f7JuQkKCqqiqVlpaqqKhIeXl52rJl\n",

"S7vbZ2Vlqba21mNJTEzswokBAEB3YVvIDBs2TNXV1WpqapIkWZaliooKhYaGemwXEBCgwMBASVJI\n",

"SIjmzJmjkpKSdvfrdDoVEBDgsfj5+dn1MAAAQDdmW8gMGjRICQkJ2rx5sySpsLBQISEhioiI8Niu\n",

"urpaLS0tkqSzZ8+quLhY8fHxdo0FAAB6EFtfWlq3bp3WrVunqKgorVq1Shs3bpQkpaWlaceOHZLO\n",

"B05MTIxiY2OVlJSkSZMmad68eXaOBQAAeghb334dHR2tt99+u9X9+fn57q8XL16sxYsX2zkGAADo\n",

"oXx+si8AAEBHETIAAMBYhAwAADAWIQMAAIxFyAAAAGMRMgAAwFiEDAAAMBYhAwAAjEXIAAAAYxEy\n",

"AADAWIQMAAAwFiEDAACMRcgAAABjETIAAMBYhAwAADAWIQMAAIxFyAAAAGMRMgAAwFiEDAAAMBYh\n",

"AwAAjEXIAAAAYxEyAADAWIQMAAAwFiEDAACMRcgAAABjETIAAMBYhAwAADAWIQMAAIxFyAAAAGMR\n",

"MgAAwFiEDAAAMBYhAwAAjEXIAAAAYxEyAADAWIQMAAAwlq0hc+TIEY0bN05RUVEaO3asPvzwwza3\n",

"27BhgyIjIzVixAilp6ersbHRzrEAAEAPYWvIZGZmKiMjQ59++qmWLVumuXPnttrm+PHjWr58uUpK\n",

"SlReXq6TJ09q/fr1do4FAAB6CNtCpqamRu+9957uueceSdKMGTNUWVmp8vJyj+22bt2q5ORkDR48\n",

"WA6HQwsWLFBBQUG7+21oaFBdXZ3H0tzcbNfDAAAA3Zi/XTuurKzUkCFD5O9//p9wOBwKDQ1VRUWF\n",

"IiIi3NtVVFQoLCzMfTs8PFwVFRXt7jc3N1fZ2dke940cOVJLly7t5EcgpXT6HnuG5uZm7du3T4mJ\n",

"ifLz8/P1OD6zdOk/bdnvpf7ecRy6j646Fnb9zkk94/87E/4mTDyG3s7szXEICwvTAw88cDnj2Rcy\n",

"dsnKymoVLU6nU06n00cTXXnq6uoUGBio1157TQEBAb4e54rFceg+OBbdA8ehe+jq42BbyAwbNkzV\n",

"1dVqamqSv7+/LMtSRUWFQkNDPbYLDQ3V0aNH3bddLlerbX6MaAEAAN+z7RyZQYMGKSEhQZs3b5Yk\n",

"FRYWKiQkxONlJen8uTM7duzQiRMnZFmW8vLyNHv2bLvGAgAAPYit71pat26d1q1bp6ioKK1atUob\n",

"N26UJKWlpWnHjh2SpOHDhys7O1vjx49XRESEBg4cqMzMTDvHAgAAPYSt58hER0fr7bffbnV/fn6+\n",

"x+309HSlp6fbOQo6kdPp1BNPPMFLfD7Gceg+OBbdA8ehe+jq4+CwLMvqkn8JAACgk3GJAgAAYCxC\n",

"BgAAGIuQAQAAxiJkAACAsQgZSDp/aYjo6GjFxcUpLi5OL7/8sqQLX8G8o+vwgyVLlig8PFwOh0Nl\n",

"ZWXu++34uXNM2tfecWjv70LiONjh3Llzmj59uqKiohQbG6tJkya5r89XU1OjyZMnKzIyUqNGjdIb\n",

"b7zh/j471l3JLnQcJk6cqBtuuMH9N/HHP/7R/X0+Ow4WYFlWWFiYdeDAgVb333777dbGjRsty7Ks\n",

"v//979ZNN9102evwg3//+99WZWVlq5+/HT93jkn72jsO7f1dWBbHwQ719fXWzp07rZaWFsuyLOvZ\n",

"Z5+1brvtNsuyLGvevHnWE088YVmWZe3bt8+6/vrrre+++862dVeyCx2H2267zSoqKmrz+3x1HAgZ\n",

"WJbV9n/YJ0+etPr162c1NjZalmVZLS0t1nXXXWcdOXKkw+vQth///O34uXNMLs2lhgzHoWvs37/f\n",

"CgsLsyzLsvr27WtVV1e7140dO9bavXu3bevwgx8fhwuFjK+OAy8twe3ee+9VTEyM5s+fr1OnTl3w\n",

"CuYdXYeLs+PnzjHpuP/9u5DsOUZobc2aNZo2bZpOnz6txsZGDR482L0uPDxcFRUVtqyDp++Pw/ce\n",

"eeQRxcTE6Je//KWOHTsmST49DoQMJElvvPGGDh06pNLSUg0YMECpqam+HgnwOf4ufGflypUqLy9X\n",

"bm6ur0e5ov3vcdi0aZMOHz6sQ4cOacKECbrrrrt8PCEhg//3/RXHr7rqKj344IMqKSnxuIK5JI8r\n",

"mHd0HS7Ojp87x6Rj2vq7kOw5RvjB008/rW3btmnXrl3q06ePgoOD5e/vrxMnTri3cblcCg0NtWUd\n",

"zvvf4yCd/92Xzj+buHjxYh07dkynT5/26XEgZKBvvvlGZ86ccd8uKChQfHz8Ba9g3tF1uDg7fu4c\n",

"E++193ch2XOMcN7q1atVUFCg3bt3KygoyH3/rFmzlJeXJ0nav3+/Pv/8c9122222rbvStXUcmpqa\n",

"dPLkSfc2hYWFuu666xQcHCzJh8fhks+mQY919OhRKy4uzoqJibFGjRplJScnW8ePH7csy7IOHz5s\n",

"JSUlWZGRkdaYMWOsQ4cOub+vo+vwg4yMDOv666+3/Pz8rEGDBlkjRoywLMuenzvHpH1tHYcL/V1Y\n",

"FsfBDpWVlZYka/jw4VZsbKwVGxtrJSYmWpZlWSdOnLAmTZpkRUREWD/96U+tf/3rX+7vs2Pdlay9\n",

"4/D1119bY8aMsUaNGmWNHj3a+vnPf26VlZW5v89Xx4GLRgIAAGPx0hIAADAWIQMAAIxFyAAAAGMR\n",

"MgAAwFiEDAAAMBYhAwAAjEXIAAAAYxEyAADAWIQMAAAwFiEDAACM9X9t08U20JFdYQAAAABJRU5E\n",

"rkJggg==\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-dcc1edee-7698-4520-a0e9-b72b42b807e8\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-dcc1edee-7698-4520-a0e9-b72b42b807e8\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_31['Height(Inches)'].plot(kind='hist', bins=20, title='Height(Inches)')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-cb975671-7a1d-4ddc-bdcc-1233200ca8bc\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAfI0lEQVR4nO3de3CV9ZnA8ScQjSKXcHFHlBIGgSiCBEMp9VLRLq1aF9Hq7pax\n",

"oFsXy+q4TN2pxTpTqRbsZd2qs1Zk2mrXS6EKuquttShKW7eAgHipoiCgCAqCBFwhQnj3D6dZsxDI\n",

"gby/Y5LPZ+bMkPe8ed/nl4vz9Zw355RkWZYFAEBC7Yo9AADQ9ggQACA5AQIAJCdAAIDkBAgAkJwA\n",

"AQCSEyAAQHICBABIToAAAMkJEGijpk6dGl/4wheavP9TTz0VJSUlsWvXroLPtXPnzhg8eHAsXLiw\n",

"4M9tirvuuit69eqVy7EjIv7mb/4m7rrrrtyOD22RAIEWaOTIkXHdddftsf2SSy6Jiy++uEnHuPba\n",

"a+Pxxx9PMtdPfvKTOPbYY2P48OEREbF69eooKSmJFStWNOv583LjjTfGNddcE9u3by/2KNBqCBAg\n",

"V7t3745/+7d/iwkTJhR7lAM2ZMiQqKioiHvuuafYo0CrIUCgldqxY0dce+21ceyxx0bXrl3jc5/7\n",

"XCxdurT+/uuvvz5OPfXU+o/feeedGDNmTJSXl0ffvn3j3nvvjZKSknjqqacaHPehhx6KAQMGRKdO\n",

"nWLUqFHx1ltvRUTE17/+9fj9738fP/jBD6Jjx47RsWPHiIhYsmRJrFu3Ls4444xGZ/3L0zsPPPDA\n",

"Xo8dEbF9+/a47rrr6u/v27dv3H333Q2OM3369OjTp0906dIlLrrooti6dWv9fVu2bImJEydGRUVF\n",

"dO/ePc4555x4/fXX6++fNWtWnHDCCdG5c+fo0aNH/PVf/3WDY5911lkxe/bs/X3ZgSYSINBKff3r\n",

"X4+FCxfG008/HRs3boy//du/jS9+8YuxZcuWve4/duzYqKuri1WrVsXixYtj1qxZe91vzpw5sWjR\n",

"oli7dm188MEHce2110ZExB133BGnnXZafPOb34z3338/3n///YiIePbZZ6Nv375x+OGH73fmxo4d\n",

"EfGP//iP8fjjj8fDDz8cW7dujT/84Q8xePDg+vvffvvteOWVV+Lll1+OV155JZ577rn413/914iI\n",

"yLIszj///Ni6dWssXbo01q1bF4MHD45zzz03du7cGR988EFcfPHFcdttt8XWrVtj7dq1Dc4dEXHi\n",

"iSfGokWL9rsGoGkECLRQP/rRj6K8vLzB7b777ouIiE2bNsXdd98d//7v/x69evWK0tLSuPLKK6NL\n",

"ly7xyCOP7HGstWvXxpNPPhnf//73o2vXrtG1a9f43ve+t9fzTps2Lbp06RJdunSJsWPH7vfC0s2b\n",

"N0eXLl2atKbGjv3uu+/GvffeG7fffnscf/zxUVJSEkcffXScdNJJ9Z9bWloaP/jBD+Lwww+Pnj17\n",

"xpgxY+o/f+nSpfHHP/4xpk+fHt26dYuysrKYOnVqrFq1KhYsWBAREYcccki8/PLL8e6778Zhhx0W\n",

"Z555ZoPZunTpEu+9916T1gHsnwCBFupf/uVfYsuWLQ1uY8eOjYiov7jzM5/5TINAeeutt2Lt2rV7\n",

"HOsvT3VUVFTUb+vTp89ez3v00UfX//uII46Ibdu27XPObt26RU1NTZPW1NixV61aFRERlZWVjX5u\n",

"jx494pBDDtnr57/22muxa9eu6NWrV/3Xonv37hER8eabb0aHDh3isccei7lz50ZlZWUMHjw4brnl\n",

"lgbHr6mpia5duzZpHcD+lRZ7AKD5HXXUURER8fzzz0fv3r33u/8xxxwTERFr1qyJgQMH1v+7UO3a\n",

"7fn/NNXV1fH666/Hjh074rDDDiv4mBH/F0OvvvpqVFdXF/z5Rx11VBx66KGxcePGBpHycaeddlqc\n",

"dtppkWVZPP3003HWWWfFwIEDY9SoURER8cILL8SwYcMOaH5gTx4BgVaooqIixowZE1dccUV9SGzb\n",

"ti1+85vfxPr16/fYv1evXjFy5MiYPHly/aMpe/tz2v056qij4tVXX22wrbq6Onr27Bnz5s07sMVE\n",

"xJFHHhlf+cpX4oorrojly5dHRMT69etjyZIlTfr8U089NQYNGhQTJ06MDRs2RETEe++9Fw8++GB8\n",

"8MEH8fbbb8evfvWr2LJlS5SUlER5eXmUlJREaen//T/aY489Fueff/4BrwFoSIBAK3XfffdFdXV1\n",

"jBo1Kjp16hSVlZUxY8aMyLKs0f2zLIuKiooYOnRojB49OiKioEctrr766li+fHl07do1ysvLI+Kj\n",

"R0UmTZoU06dPP6j1zJgxI04//fQ4++yzo2PHjnHKKafESy+91KTPbd++ffzud7+LDh06xGc+85no\n",

"1KlTDBkyJObMmRMlJSWRZVnccccd0bdv3+jYsWNceOGF8b3vfa/+L3eef/75WLVqVXz1q189qDUA\n",

"/6cka+y/RkCb9txzz8XQoUNj3bp10bNnz4M61s6dO2Po0KHxs5/9rP7FyFqS0aNHx/nnnx+XXnpp\n",

"sUeBVkOAABER8eKLL8aHH34YVVVVsW7duhg3blxERDz55JNFngxojTwFA0TER3/l8fd///fRqVOn\n",

"qK6ujh49esS9995b7LGAVsojIABAch4BAQCSEyAAQHICBABIToAAAMl9YgPk/78PAwDQenxiA+RA\n",

"3ocCAGgZPrEBAgC0XgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABIToAA\n",

"AMkJEAAguVwDpE+fPlFZWRlVVVVRVVUVM2fOzPN0AEALUZr3CWbOnBlVVVV5nwYAaEFyD5CmqK2t\n",

"jdra2gbb6urqijQNAJC33ANk3LhxkWVZDB8+PG666aY48sgj99hn2rRpMWXKlAbbRowYkfdoAJ8I\n",

"fb71aC7HXX3Tl3I5LjSHXK8BmT9/fjz//POxZMmS6NGjR4wfP36v+02ePDlqamoa3IYPH57naABA\n",

"EeX6CEjv3r0jIuKQQw6JSZMmxYABA/a6X1lZWZSVlTXY1r59+zxHAwCKKLdHQP7nf/4ntmzZUv/x\n",

"/fffH0OHDs3rdABAC5LbIyDvvPNOfPnLX466urrIsiz69u0bv/jFL/I6HQDQguQWIH379o2lS5fm\n",

"dXgAoAXzSqgAQHICBABIToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJ\n",

"CRAAIDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwA\n",

"AQCSEyAAQHICBABIToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAA\n",

"IDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCS\n",

"EyAAQHICBABIToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAAIDkB\n",

"AgAklyRAfv7zn0dJSUk89NBDKU4HAHzC5R4gq1evjhkzZsSIESPyPhUA0ELkGiC7d++Oyy67LG67\n",

"7bYoKyvL81QAQAtSmufBb7755jjllFOiurp6n/vV1tZGbW1tg211dXV5jgYAFFFuAfLiiy/Ggw8+\n",

"GPPnz9/vvtOmTYspU6Y02OYpG1qbPt96NJfjrr7pS7kcFyBPuT0F8/vf/z5Wr14d/fv3jz59+sSf\n",

"/vSnmDBhQvzkJz/ZY9/JkydHTU1Ng9vw4cPzGg0AKLLcHgGZOHFiTJw4sf7jkSNHxqRJk2LMmDF7\n",

"7FtWVrbHNSLt27fPazQAoMi8DggAkFyuF6F+3FNPPZXqVADAJ5xHQACA5AQIAJCcAAEAkhMgAEBy\n",

"AgQASE6AAADJCRAAIDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdA\n",

"AIDkBAgAkJwAAQCSEyAAQHICBABIToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQA\n",

"SE6AAADJCRAAIDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDk\n",

"BAgAkJwAAQCSEyAAQHICBABIToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6A\n",

"AADJCRAAIDkBAgAkJ0AAgOQECACQnAABAJITIABAcgIEAEhOgAAAyZXmefAvfOEL8fbbb0e7du2i\n",

"U6dOceutt8bQoUPzPCUA0ALkGiCzZs2K8vLyiIiYM2dOXHLJJbFs2bI8TwkAtAC5Bshf4iMioqam\n",

"JkpKSva6X21tbdTW1jbYVldXl+doAEAR5RogERHjxo2LefPmRUTEr3/9673uM23atJgyZUqDbSNG\n",

"jMh7NACgSAq+CPW3v/1tQfv/4he/iDfffDNuvPHGuOaaa/a6z+TJk6OmpqbBbfjw4YWOBgC0EAUH\n",

"yHe/+92orKyMW265JbZu3drkzxs/fnzMmzcvNm3atMd9ZWVl0blz5wa39u3bFzoaANBCFBwgf/zj\n",

"H+OXv/xlvPjiizFgwID4p3/6p/jzn/+8x35btmyJdevW1X/80EMPRffu3aNbt24HNzEA0OId0DUg\n",

"Q4cOjRkzZsRzzz0Xo0ePjjvvvDPOOOOMuPnmm2Pw4MER8dFFpxdddFFs37492rVrF0ceeWQ88sgj\n",

"jV6ICgC0HQcUIHPnzo3bbrstXnjhhbjiiivia1/7Wjz11FNx/vnnx4oVKyIioqKiIhYuXNiswwIA\n",

"rUPBAXL88cdHjx494qqrrooLLrig/lqNCy+8MH760582+4AAQOtTcIDcc889UV1dvdf7fvOb3xz0\n",

"QABA61fwRaiLFy+OzZs313+8adOmmDFjRrMOBQC0bgUHyO23397gL1m6d+8et99+e7MOBQC0bgUH\n",

"SJZle2zzsukAQCEKDpCePXvGrFmz6j+eOXNm9OzZs1mHAgBat4IvQv3xj38c5513Xnzzm9+MiIgO\n",

"HTrEww8/3OyDAQCtV8EBctxxx8Wf//znWL58eUREVFZWetl0AKAgB/RCZCUlJVFeXh67du2Kt956\n",

"KyIievfu3ayDAQCtV8EBctddd8VVV10VhxxySLRr99ElJCUlJbFhw4ZmHw4AaJ0KDpAbbrghFi1a\n",

"FJWVlXnMAwC0AQX/FUyPHj3EBwBwUAoOkDFjxsSPf/zj2LBhQ2zdurX+BgDQVAU/BfPtb387IiK+\n",

"8Y1vRElJSWRZFiUlJV6MDABosoIDZPfu3XnMAQC0IQU/BRPx0RvS/cd//EdERGzZsiXWr1/frEMB\n",

"AK3bAb0Z3T/8wz/E9ddfHxEfvRvu2LFjm3suAKAVKzhA7rzzzvjTn/4UnTt3joiIY489NjZu3Njs\n",

"gwEArVfBAVJWVhaHH354g22lpQf0gqoAQBtVcIAceeSR8eqrr0ZJSUlEfPTKqF6GHQAoxAG9G+5X\n",

"vvKVeOWVV+JTn/pUdO7cOR555JE8ZgMAWqmCA6Rfv36xYMGCWL58eWRZ5t1wAYCCFRwgb7zxRkRE\n",

"HHHEERER3g0XAChYwQFSXV1d/wqoO3bsiA8++CC6d+/u3XABgCYrOED+/5/czp49O5YtW9ZsAwEA\n",

"rd8BvRLqx11wwQXx6KOPNscsAEAbUfAjIB9/59u6urpYsGCBd8MFAApScICUl5fXXwPSvn376N+/\n",

"f9x66615zAYAtFLeDRcASO6grwEBAChUwY+AtGvXrv5l2D8uy7IoKSmJurq6ZhkMAGi9Cg6Q7373\n",

"u7F9+/aYOHFiRETccccdcfjhh8ekSZOaezYAoJUqOEDmzJkTixcvrv/4xhtvjOrq6vj2t7/drIMB\n",

"AK1XwdeAbNu2rcGrnm7YsCG2bdvWrEMBAK1bwY+AXH311TFkyJA455xzIiLisccei+uvv7655wIA\n",

"WrGCA+Tyyy+PU045JebNmxcREd/4xjfihBNOaPbBAIDWq+AAiYjo3r17DB48OEaOHBm7du2KDz/8\n",

"MA499NDmng0AaKUKvgbkgQceiBEjRsSll14aEREvvfRSjBkzprnnAgBasYIDZNq0abFkyZIoLy+P\n",

"iIghQ4bEmjVrmnsuAKAVKzhA2rdvH927d2+wzdMvAEAhCg6QTp06xTvvvFP/aqhPPPFEdOvWrdkH\n",

"AwBar4IvQv3+978fZ599drz++utx6qmnxqpVq+LRRx/NYzYAoJUqKEB2794ddXV1MW/evHjmmWci\n",

"y7I4+eST668HAQBoioICpF27djFhwoRYtmxZnH322XnNBAC0cgVfA9K/f/9YsWJFHrMAAG1EwdeA\n",

"bN68OaqqquLkk0+Ojh071m+fPXt2sw4GALReTQ6QCRMmxJ133hnjx4+P0aNHR9euXfOcCwBoxZoc\n",

"IM8++2xERIwfPz5OOumkWLJkSW5DAQCtW8HXgEREZFnW3HMAAG1Ikx8B2b59e7zwwguRZVns2LGj\n",

"/t9/ceKJJ+YyIADQ+hQUIKNHj67/+OP/Likpiddff715JwMAWq0mB8jq1atzHAMAaEsO6BoQAICD\n",

"IUAAgOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJJdbgOzYsSPGjBkTAwYMiCFDhsSo\n",

"UaNixYoVeZ0OAGhBcn0EZMKECbF8+fJYtmxZnHfeeXHZZZfleToAoIXILUAOO+ywOOecc6KkpCQi\n",

"IkaMGNHo+8nU1tbG1q1bG9zq6uryGg0AKLImvxndwbrlllvivPPO2+t906ZNiylTpjTYNmLEiNxm\n",

"6fOtR3M57uqbvpTLcSPM/P/lNXeeM5NGS/xdyUtL/XluiV9rCpfkItSpU6fGihUrYtq0aXu9f/Lk\n",

"yVFTU9PgNnz48BSjAQBFkPsjID/60Y9i9uzZMXfu3OjQocNe9ykrK4uysrIG29q3b5/3aABAkeQa\n",

"IDfffHPcf//9MXfu3CgvL8/zVABAC5JbgKxduzauvvrq6Nu3b5xxxhkR8dEjHQsWLMjrlABAC5Fb\n",

"gPTq1SuyLMvr8ABAC+aVUAGA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAAIDkBAgAkJ0AAgOQE\n",

"CACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABIToAA\n",

"AMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAAIDkBAgAkJ0AAgOQECACQ\n",

"nAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABIToAAAMkJ\n",

"EAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAAIDkBAgAkJ0AAgOQECACQnAAB\n",

"AJITIABAcgIEAEhOgAAAyeUaIFdddVX06dMnSkpK4rnnnsvzVABAC5JrgFx44YXxhz/8ISoqKvI8\n",

"DQDQwpTmefDPfe5zTdqvtrY2amtrG2yrq6vLYyQA4BMg1wBpqmnTpsWUKVMabBsxYkSRpjlwfb71\n",

"aLFHoA3yc5eGr3M6eX2tV9/0pVyOm6c8f+6K/fX4RFyEOnny5KipqWlwGz58eLHHAgBy8ol4BKSs\n",

"rCzKysoabGvfvn2RpgEA8vaJeAQEAGhbcg2Qyy+/PHr16hVr166NL37xi9GvX788TwcAtBC5PgUz\n",

"ffr0PA8PALRQnoIBAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHIC\n",

"BABIToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAAIDkBAgAkJ0AA\n",

"gOQECACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABI\n",

"ToAAAMkJEAAgOQECACQnQACA5AQIAJCcAAEAkhMgAEByAgQASE6AAADJCRAAIDkBAgAkJ0AAgOQE\n",

"CACQnAABAJITIABAcgIEAEhOgAAAyQkQACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABIToAA\n",

"AMkJEAAguVwD5LXXXouTTz45BgwYEJ/+9KfjpZdeyvN0AEALkWuAXH755TFhwoR49dVX45prrolL\n",

"Lrkkz9MBAC1EbgGyYcOGePbZZ+Piiy+OiIgvf/nL8eabb8aKFSv22Le2tja2bt3a4FZXV5fXaABA\n",

"kZVkWZblceDFixfH2LFjY/ny5fXbhg8fHjfddFOceeaZDfa9/vrrY8qUKQ22HXfccXH22WfnMVrR\n",

"1NXVxcKFC2P48OHRvn37Yo+Tm7ayzoi2s9a2ss6ItrPWtrLOiLaz1k/KOisqKuKf//mf97vfJyJA\n",

"amtro7a2tsG2srKyKCsry2O0otm6dWt06dIlampqonPnzsUeJzdtZZ0RbWetbWWdEW1nrW1lnRFt\n",

"Z60tbZ2leR34U5/6VKxfvz527doVpaWlkWVZvPHGG9G7d+899m2NsQEANC63a0D+6q/+Kk466aS4\n",

"5557IiLiwQcfjF69ekW/fv3yOiUA0ELk9ghIRMT06dPjkksuialTp0bnzp3j5z//eZ6nAwBaiFwD\n",

"pLKyMv77v/87z1O0KGVlZfGd73yn1T/d1FbWGdF21tpW1hnRdtbaVtYZ0XbW2tLWmdtFqAAAjfFS\n",

"7ABAcgIEAEhOgAAAyQkQACA5AZKT2trauPLKK6N///4xePDg+vfE6dOnT1RWVkZVVVVUVVXFzJkz\n",

"izzpwWtsrY1tb6n2tp5NmzbVfy+rqqpiwIABUVpaGps3by72uAelse/dr3/96zjppJOiqqoqBg0a\n",

"FHfffXeRJz14ja31sccei2HDhsWJJ54YI0aMiGXLlhV50gO3r5/TDRs2xFlnnRX9+/ePQYMGxfz5\n",

"84s97kHZ11qnTp0alZWV0a5du3jooYeKPepB2dc6L7300hgwYEAMGTIkTjnllFi0aFGxx927jFxM\n",

"mjQpu/LKK7Pdu3dnWZZl69evz7IsyyoqKrKlS5cWcbLm19haG9veUjVlPT/84Q+zc889N/VozW5v\n",

"a929e3fWtWvXbNmyZVmWZdmqVauysrKybOvWrcUc9aDtba2bN2/OunXrlr344otZlmXZ/PnzsxNO\n",

"OKGYYzarj/+cXnrppdl3vvOdLMuybOHChdkxxxyTffjhh0Wcrnl9fK0LFizIVq5cmZ1++unZnDlz\n",

"ijtYM/v4Oh9++OFs586dWZZl2X/9139lFRUVRZyscQIkB++//37WqVOnrKamZo/7WluANLbWfX0N\n",

"WqKmrue4445r8f9ha2ytu3fvzrp165Y9/fTTWZZl2bJly7Kjjz46q62tLcaYzaKxtS5atCjr379/\n",

"g22dOnXKFi9enHK83Hz85/SII45oENOf/vSns9/97ndFmqz57e13sjUGSGP/7dm4cWNWWlpaHySf\n",

"JJ6CycHKlSujW7duMXXq1Bg2bFicdtpp8cQTT9TfP27cuBg8eHB87Wtfi40bNxZx0oPX2Fr39zVo\n",

"aZqynmeeeSbee++9OPfcc4s0ZfNobK0lJSUxc+bMuOCCC6KioiJOPfXUuPvuu+PQQw8t9sgHrLG1\n",

"9u/fPzZt2hTPPPNMRET853/+Z2zbti1Wr15d3IGbwcd/Tjdt2hQ7d+6Mo446qv7+Pn36xBtvvFHE\n",

"CZtPa/md3J99rfOWW26Jc845J0pLc33d0QMiQHKwa9euWLNmTQwcODCeffbZuPXWW+Pv/u7v4p13\n",

"3on58+fH888/H0uWLIkePXrE+PHjiz3uQWlsrdu3b2/0a9AS7et7+hc//elPY9y4cZ/IX/RC7Gut\n",

"N954Y8yePTvWrFkTTzzxRHz1q1+Nd999t9gjH7DG1rpjx4544IEHYvLkyVFdXR2PP/54DBw4sMV/\n",

"byNaz89pU7SVtTa2znvuuSdmzZoVd955Z5Em249iPwTTGm3cuDFr165dtmvXrvptw4YN2+NhzXXr\n",

"1mUdO3ZMPV6zamytv/rVr5r0NWgp9vc93bZtW9axY8fs5ZdfLtaIzaaxtf7whz/c42mJYcOGZY8/\n",

"/njqEZtNU39Xd+zYkZWXl2evvfZa6hGb1d5+Tjt06NAqn4LZ1+9ka3oKprF1/vKXv8z69euXrVmz\n",

"pkiT7Z9HQHLQo0eP+PznPx+//e1vIyJi1apVsWrVqjj++ONjy5Yt9fvdf//9MXTo0CJN2TwaW+tn\n",

"P/vZRr8GLdG+vqcRETNnzowhQ4bEcccdV8wxm0Vja73oooti/fr18fLLL0dExIoVK2LlypVRWVlZ\n",

"zHEPyr6+r+vXr6/f74Ybbogzzzyzxb+b995+Ti+66KK44447IiJi0aJF8dZbb8Xpp59erBGbTWv6\n",

"ndyXva1z1qxZcd1118XcuXOjd+/eRZxuP4pdQK3VypUrs5EjR2aDBg3KTjzxxOyBBx7IVq5cmVVV\n",

"VWWDBw/OBg0alI0ePTpbtWpVsUc9aHtb6762t1T7Ws9nP/vZ7Gc/+1kRp2teja31vvvuq982aNCg\n",

"7N577y3ypAevsbVedtllWWVlZXbsscdmF198cfbee+8Vd9BmsLef07fffjsbNWpU1q9fv2zgwIHZ\n",

"k08+WaTpmtfe1nrDDTdkxxxzTHbooYdm3bt3z4455phsw4YNRZqweextnaWlpVmvXr2yIUOG1N/e\n",

"fffdIk3YOG9GBwAk5ykYACA5AQIAJCdAAIDkBAgAkJwAAQCSEyAAQHICBABIToAAAMkJEAAgOQEC\n",

"ACT3v974a/3UdsfqAAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-cb975671-7a1d-4ddc-bdcc-1233200ca8bc\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-cb975671-7a1d-4ddc-bdcc-1233200ca8bc\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_32['Weight(Pounds)'].plot(kind='hist', bins=20, title='Weight(Pounds)')\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-5192bf86-1834-47aa-9189-0a7474ee7f0c\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAAfOklEQVR4nO3de3BU9d3H8c8mwZVbWAgIlJBEJAEVSDCSRqxyTRSskHLpBeRi\n",

"pVGopQx2RKqMhCJBRynICAKjiXihqFwsokiQUKyVuyBoiQYJCRgCBZMAhUWW8/zB45aVgFnI+S27\n",

"eb9mdoY9e3LOlywnvOfsya7DsixLAAAABoUFegAAAFD7ECAAAMA4AgQAABhHgAAAAOMIEAAAYBwB\n",

"AgAAjCNAAACAcQQIAAAwjgABAADGESBALdWgQQOtW7eu2ut3795dTzzxxGXt64033tA999xzWV9r\n",

"SmFhoRwOh4qKin503eeee04jR460fSYglBEgQBCYPXu2WrRoofM/OWHt2rVyOByaMmWKz7oDBgzQ\n",

"0KFDf3Sbx48fV/fu3WtsxnXr1snhcOjMmTM+y0+dOqU//elPeuqpp7zLRo4cqTp16qhBgwZq2LCh\n",

"4uPjNX369BqbxW4PP/ywVq9erS1btgR6FCBoESBAEEhLS1NZWZl27tzpXZaXl6cOHTpozZo13mUe\n",

"j0f5+flKT08PxJhVWrRokaKjo5WUlOSz/Fe/+pWOHz+uyspKzZkzR1lZWcrNzQ3IjP5yOp267777\n",

"9Ne//jXQowBBiwABgkD79u0VExOjvLw877K8vDxNnjxZW7du1fHjxyVJmzdvVnl5uXr37q2NGzeq\n",

"e/fuioqKUmxsrCZNmuRzdsLhcPjES05Ojtq2bauGDRtqwIABevjhhy84Q3Ls2DENGTJEjRo1UuvW\n",

"rTV37lxJUnFxsfr06SNJcrlcatCggaZNmyZJWrJkie66666L/t0cDofS0tJ08803a+vWrZKkTz75\n",

"RHfccYcaN26s66+/Xo899pjcbvdFZy8qKpLD4VBhYaEkKTc3V9HR0Zo3b57i4uLUqFEjDR48WJWV\n",

"ld6v2bNnj3r16qXIyEjdeOONys/P95lrx44d6tatm1wulxo3bqzk5GQVFBR4H7/77ru1YsWKC874\n",

"AKgeAgQIEmlpad4AOXLkiL744gv17dtXnTt39l7LkZeXp5tuuknHjx9Xr1699NBDD6msrEzr16/X\n",

"3//+dz399NNVbnv9+vV66KGHNHv2bJWXl2vUqFF6+eWXL1gvNzdXo0aN0rfffquZM2fq4YcfVmFh\n",

"oWJiYvT+++9LksrLy3X8+HH9+c9/liRt2bJFHTp0uOjf6+zZs1q9erV27dqllJQUFRcXq3fv3ho4\n",

"cKDKysq0evVqrVixQhMmTPDr+3Xw4EHt3r1b//73v7V7925t375dzz33nKRzZ4ruvfdexcTEqLS0\n",

"VHl5eVqwYIHP148ZM0a9evXSf/7zHx0+fFgvvfSSXC6X9/FOnTrp2LFj2r17t19zATiHAAGCRHp6\n",

"utavXy+3260PP/xQqampqlu3rnr37u0Nk7y8PKWnp+uFF17Qvffeq1//+teKiIhQbGysHn30UeXk\n",

"5FS57YULF6p///7q06ePwsPD1bdvX/Xt2/eC9QYOHKiePXsqLCxMAwcOVJMmTbxnLS7m6NGjatSo\n",

"0QXL33zzTblcLjVr1kzjx4/XU089pWHDhun1119XQkKCxo0bp2uuuUbx8fGaOnWq5s+f73MNzI+J\n",

"iIjQM888o7p166ply5bKyMjQpk2bJEkbNmxQQUGBZs6cqfr16ys6OlqTJk3y+fprrrlGxcXF2rdv\n",

"nyIiIpSUlKTmzZt7H//+73T06NFqzwTgfwgQIEj06tVLbrdbH3/8sfLy8tS7d2/v8ry8PB0/flwb\n",

"NmxQWlqavvrqKy1btkwul8t7Gz16tA4ePFjltg8cOKDY2FifZXFxcRes95Of/MTnfv369XXs2LFL\n",

"zt2kSRNVVFRcsPyXv/ylysvLdeTIEe3atUuPPPKIJKmkpEQ33HCDz7pt27bVyZMndfjw4Uvu63xN\n",

"mzZVnTp1qpx1//79aty4sU8YXX/99T5fn5ubK4fDoZ49eyo6Olrjxo3zvtQlyft3atKkSbVnAvA/\n",

"BAgQJKKionTLLbcoLy/PJ0BSU1NVUlKi1157TQ6HQ926dVOLFi00ZMgQlZeXe2+VlZU+/4Ger1Wr\n",

"Vtq3b5/Psh/e/zFhYVX/OElOTtbnn39e7e20bt1aX3/9tc+yPXv2qG7dumrWrJmkc79CfOLECe/j\n",

"33zzjV+zRkdH69tvv/UJox/++m1sbKwWLFigffv2ad26dcrLy1N2drb38Z07d6pBgwZq3769X/sG\n",

"cA4BAgSR9PR0vfLKK6qoqNCtt94qSapTp47uuOMOTZkyRV27dlX9+vU1ZswYvf3223rrrbd0+vRp\n",

"eTweFRYWatWqVVVud9iwYXrnnXf0wQcfyOPxaNWqVXrvvff8mq1FixaS5HOhpnTu14I/+OCDam9n\n",

"yJAhKigo0OzZs3X69Gnt2bNHkyZN0qhRo+RwOCRJt956q3Jzc3Xq1CmVlZUpKyvLr1l/+tOfKj4+\n",

"XuPHj9eJEyd04MABTZ061Wed3Nxc7d+/X5ZlKTIyUhEREYqIiPA+vmrVKv385z/3WQag+ggQIIik\n",

"p6ertLRUPXr08Dnj0Lt3b5WWliotLU2S1KVLF++Fla1atVJUVJQGDRp00bMa3bp105w5czRmzBi5\n",

"XC7NmzdPQ4cO1bXXXlvt2RISEvSHP/xBPXr0kMvl8r6vx9ChQ1VcXKzt27dXazuxsbFavXq1Fi9e\n",

"rOuuu049e/ZUnz599Mwzz3jXeeGFF3Tw4EE1bdpUaWlpGjZsWLXnlM5dH7JixQrt3btXLVu2VO/e\n",

"vfXAAw/4rJOfn6+UlBQ1aNBAiYmJuu2227wXwp4+fVqvvvqqxo8f79d+AfyPw/Lnqi4AtUZGRoaa\n",

"N2+uefPmXfG2Xn/9db3xxhtauXJlDUwWeDNmzNCOHTv0yiuvBHoUIGgRIAAknXu/jrS0NNWtW1dL\n",

"ly7V0KFDtXbtWt15552BHg1ACOLFSwCSpBUrVuh3v/udTp8+rdjYWL388svEBwDbcAYEAAAYx0Wo\n",

"AADAOAIEAAAYR4AAAADjCBAAAGDcVRsgs2bNCvQIAADAJldtgPj7ORQAACB4XLUBAgAAQhcBAgAA\n",

"jCNAAACAcQQIAAAwjgABAADGESAAAMA4AgQAABhHgAAAAOMIEAAAYBwBAgAAjCNAAACAcQQIAAAw\n",

"ztYAiYuLU7t27ZSUlKSkpCQtXrzYzt0BAIAgEWH3DhYvXqykpCS7dwMAAIKI7QFSHW63W26322eZ\n",

"x+MJ0DQAAMButgfI8OHDZVmWUlJSNH36dDVr1uyCdbKzs5WVleWzLDU11e7RAISguMdW2rLdoun3\n",

"2LJdoLay9RqQ9evX67PPPtO2bdvUtGlTjRgxosr1Jk6cqIqKCp9bSkqKnaMBAIAAsvUMSExMjCSp\n",

"Tp06GjdunBISEqpcz+l0yul0+iwLDw+3czQAABBAtp0BOXHihMrLy733Fy1apM6dO9u1OwAAEERs\n",

"OwNSVlamgQMHyuPxyLIstWnTRgsXLrRrdwAAIIjYFiBt2rTRp59+atfmAQBAEOOdUAEAgHEECAAA\n",

"MI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADA\n",

"OAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADj\n",

"CBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwj\n",

"QAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4A\n",

"AQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIE\n",

"AAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYZyRAcnJy5HA4\n",

"tHz5chO7AwAAVznbA6SoqEgLFixQamqq3bsCAABBwtYAOXv2rEaNGqXZs2fL6XTauSsAABBEIuzc\n",

"+IwZM3T77bcrOTn5kuu53W653W6fZR6Px87RAABAANl2BmTXrl1asmSJnnjiiR9dNzs7W40aNfK5\n",

"bdq0ya7RAABAgNkWIB999JGKiooUHx+vuLg4bdiwQZmZmZo7d+4F606cOFEVFRU+t5SUFLtGAwAA\n",

"AWbbSzCjR4/W6NGjvfe7d++ucePGKSMj44J1nU7nBdeIhIeH2zUaAAAIMN4HBAAAGGfrRajnW7du\n",

"naldAQCAqxxnQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAA\n",

"gHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAA\n",

"xhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAY\n",

"R4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAc\n",

"AQIAAIwjQAAAgHEECAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEE\n",

"CAAAMI4AAQAAxhEgAADAOAIEAAAYR4AAAADjCBAAAGAcAQIAAIwjQAAAgHEECAAAMI4AAQAAxhEg\n",

"AADAOAIEAAAYR4AAAADjIuzceHp6ug4ePKiwsDA1bNhQzz//vDp37mznLgEAQBCwNUDefPNNuVwu\n",

"SdKyZcs0cuRI7dixw85dAgCAIGBrgHwfH5JUUVEhh8NR5Xput1tut9tnmcfjsXM0AAAQQLYGiCQN\n",

"Hz5c+fn5kqT33nuvynWys7OVlZXlsyw1NdXu0QCg2uIeW2nbtoum32PLdoNxZtQefl+E+sEHH/i1\n",

"/sKFC1VSUqKpU6dqwoQJVa4zceJEVVRU+NxSUlL8HQ0AAAQJvwNkypQpateunWbNmqXKyspqf92I\n",

"ESOUn5+vI0eOXPCY0+lUZGSkzy08PNzf0QAAQJDwO0A+/vhj/e1vf9OuXbuUkJCgMWPG6Isvvrhg\n",

"vfLycn3zzTfe+8uXL1dUVJSaNGlyZRMDAICgd1nXgHTu3FkLFizQ9u3b1a9fP82fP189evTQjBkz\n",

"1LFjR0nnLjodPHiwTp48qbCwMDVr1kzvvvvuRS9EBQAAtcdlBciaNWs0e/Zs7dy5U7///e/1wAMP\n",

"aN26dfrFL36hwsJCSVJsbKw2bdpUo8MCAIDQ4HeA3HjjjWratKnGjh2rAQMGeK/VGDRokF566aUa\n",

"HxAAAIQevwPktddeU3JycpWPvf/++1c8EAAACH1+X4S6detWHT161Hv/yJEjWrBgQY0OBQAAQpvf\n",

"ATJnzhyf32SJiorSnDlzanQoAAAQ2vwOEMuyLljG26YDAAB/+B0gLVu21Jtvvum9v3jxYrVs2bJG\n",

"hwIAAKHN74tQZ86cqf79++vRRx+VJNWrV0/vvPNOjQ8GAABCl98B0r59e33xxRcqKCiQJLVr1463\n",

"TQcAAH65rDciczgccrlcOnPmjA4cOCBJiomJqdHBAABA6PI7QHJzczV27FjVqVNHYWHnLiFxOBw6\n",

"dOhQjQ8HAABCk98B8pe//EWbN29Wu3bt7JgHAADUAn7/FkzTpk2JDwAAcEX8DpCMjAzNnDlThw4d\n",

"UmVlpfcGAABQXX6/BPP4449LksaPHy+HwyHLsuRwOHgzMgAAUG1+B8jZs2ftmAMAANQifr8EI537\n",

"QLpXX31VklReXq7S0tIaHQoAAIS2y/owut/+9reaPHmypHOfhjtkyJCangsAAIQwvwNk/vz52rBh\n",

"gyIjIyVJN9xwgw4fPlzjgwEAgNDld4A4nU7VrVvXZ1lExGW9oSoAAKil/A6QZs2a6csvv5TD4ZB0\n",

"7p1ReRt2AADgj8v6NNzf/OY32r17t1q3bq3IyEi9++67dswGAABClN8B0rZtW23cuFEFBQWyLItP\n",

"wwUAAH7zO0CKi4slSfXr15ckPg0XAAD4ze8ASU5O9r4D6qlTp/Tf//5XUVFRfBouAACoNr8D5Ie/\n",

"crt06VLt2LGjxgYCAACh77LeCfV8AwYM0MqVK2tiFgAAUEv4fQbk/E++9Xg82rhxI5+GCwAA/OJ3\n",

"gLhcLu81IOHh4YqPj9fzzz9vx2wAACBE8Wm4AADAuCu+BgQAAMBffp8BCQsL874N+/ksy5LD4ZDH\n",

"46mRwQAAQOjyO0CmTJmikydPavTo0ZKkF198UXXr1tW4ceNqejYAABCi/A6QZcuWaevWrd77U6dO\n",

"VXJysh5//PEaHQwAAIQuv68BOXbsmM+7nh46dEjHjh2r0aEAAEBo8/sMyCOPPKLExET17dtXkrRq\n",

"1SpNnjy5pucCAAAhzO8AefDBB3X77bcrPz9fkjR+/HjdfPPNNT4YAAAIXX4HiCRFRUWpY8eO6t69\n",

"u86cOaPTp0/rmmuuqenZAABAiPL7GpC3335bqampuv/++yVJn3/+uTIyMmp6LgAAEML8DpDs7Gxt\n",

"27ZNLpdLkpSYmKh9+/bV9FwAACCE+R0g4eHhioqK8lnGyy8AAMAffgdIw4YNVVZW5n031A8//FBN\n",

"mjSp8cEAAEDo8vsi1Kefflp9+vTR119/rZ/97Gfau3evVq5cacdsAAAgRPkVIGfPnpXH41F+fr7+\n",

"9a9/ybIsde3a1Xs9CAAAQHX4FSBhYWHKzMzUjh071KdPH7tmAgAAIc7va0Di4+NVWFhoxywAAKCW\n",

"8PsakKNHjyopKUldu3ZVgwYNvMuXLl1ao4MBAIDQVe0AyczM1Pz58zVixAj169dPjRs3tnMuAAAQ\n",

"wqodIFu2bJEkjRgxQrfccou2bdtm21AAACC0+X0NiCRZllXTcwAAgFqk2mdATp48qZ07d8qyLJ06\n",

"dcr75+916tTJlgEBAEDo8StA+vXr571//p8dDoe+/vrrmp0MAACErGoHSFFRkY1jAACA2uSyrgEB\n",

"AAC4EgQIAAAwjgABAADGESAAAMA4AgQAABhHgAAAAOMIEAAAYBwBAgAAjCNAAACAcbYFyKlTp5SR\n",

"kaGEhAQlJiYqLS1NhYWFdu0OAAAEEVvPgGRmZqqgoEA7duxQ//79NWrUKDt3BwAAgoRtAXLttdeq\n",

"b9++cjgckqTU1NSLfp6M2+1WZWWlz83j8dg1GgAACLBqfxjdlZo1a5b69+9f5WPZ2dnKysryWZaa\n",

"mmpiLMBH3GMrbdt20fR7bNmunTMDFxOMxwquLkYuQp02bZoKCwuVnZ1d5eMTJ05URUWFzy0lJcXE\n",

"aAAAIABsPwPy7LPPaunSpVqzZo3q1atX5TpOp1NOp9NnWXh4uN2jAQCAALE1QGbMmKFFixZpzZo1\n",

"crlcdu4KAAAEEdsCZP/+/XrkkUfUpk0b9ejRQ9K5Mx0bN260a5cAACBI2BYg0dHRsizLrs0DAIAg\n",

"xjuhAgAA4wgQAABgHAECAACMI0AAAIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGEeAAAAA4wgQAABg\n",

"HAECAACMI0AAAIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGEeAAAAA4wgQAABgHAECAACMI0AAAIBx\n",

"BAgAADCOAAEAAMYRIAAAwDgCBAAAGEeAAAAA4wgQAABgHAECAACMI0AAAIBxBAgAADCOAAEAAMYR\n",

"IAAAwDgCBAAAGEeAAAAA4wgQAABgHAECAACMI0AAAIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGEeA\n",

"AAAA4wgQAABgHAECAACMI0AAAIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGEeAAAAA4wgQAABgHAEC\n",

"AACMI0AAAIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGEeAAAAA4wgQAABgHAECAACMI0AAAIBxBAgA\n",

"ADCOAAEAAMbZGiBjx45VXFycHA6Htm/fbueuAABAELE1QAYNGqR//vOfio2NtXM3AAAgyETYufE7\n",

"77yzWuu53W653W6fZR6Px46RAADAVcDWAKmu7OxsZWVl+SxLTU21bX9xj620ZbtF0++xZbuSfTPb\n",

"ie+Hr2CcGQgEjhUz7PwZXR1XxUWoEydOVEVFhc8tJSUl0GMBAACbXBVnQJxOp5xOp8+y8PDwAE0D\n",

"AADsdlWcAQEAALWLrQHy4IMPKjo6Wvv379ddd92ltm3b2rk7AAAQJGx9CWbevHl2bh4AAAQpXoIB\n",

"AADGESAAAMA4AgQAABhHgAAAAOMIEAAAYBwBAgAAjCNAAACAcQQIAAAwjgABAADGESAAAMA4AgQA\n",

"ABhHgAAAAOMIEAAAYBwBAgAAjCNAAACAcQQIAAAwjgABAADGESAAAMA4AgQAABhHgAAAAOMIEAAA\n",

"YBwBAgAAjCNAAACAcQQIAAAwjgABAADGESAAAMA4AgQAABhHgAAAAOMIEAAAYBwBAgAAjCNAAACA\n",

"cQQIAAAwjgABAADGESAAAMA4AgQAABhHgAAAAOMIEAAAYBwBAgAAjCNAAACAcQQIAAAwjgABAADG\n",

"ESAAAMA4AgQAABhHgAAAAOMIEAAAYBwBAgAAjCNAAACAcQQIAAAwjgABAADGESAAAMA4AgQAABhH\n",

"gAAAAOMIEAAAYBwBAgAAjCNAAACAcQQIAAAwjgABAADGESAAAMA4AgQAABhHgAAAAOMIEAAAYJyt\n",

"AfLVV1+pa9euSkhIUJcuXfT555/buTsAABAkbA2QBx98UJmZmfryyy81YcIEjRw50s7dAQCAIGFb\n",

"gBw6dEhbtmzRfffdJ0kaOHCgSkpKVFhYeMG6brdblZWVPjePx2PXaAAAIMAclmVZdmx469atGjJk\n",

"iAoKCrzLUlJSNH36dPXs2dNn3cmTJysrK8tnWfv27dWnTx87RgtKHo9HmzZtUkpKisLDwwM9Tq3E\n",

"cxB4PAdXB56HwLuan4PY2Fj98Y9//NH1rooAcbvdcrvdPsucTqecTqcdowWlyspKNWrUSBUVFYqM\n",

"jAz0OLUSz0Hg8RxcHXgeAi8UnoMIuzbcunVrlZaW6syZM4qIiJBlWSouLlZMTMwF6xIbAADULrZd\n",

"A3Ldddfplltu0WuvvSZJWrJkiaKjo9W2bVu7dgkAAIKEbWdAJGnevHkaOXKkpk2bpsjISOXk5Ni5\n",

"OwAAECRsDZB27drpk08+sXMXtYbT6dSTTz7JS1UBxHMQeDwHVweeh8ALhefAtotQAQAALoa3YgcA\n",

"AMYRIAAAwDgCBAAAGEeAAAAA4wiQq8TYsWMVFxcnh8Oh7du3/+hyiU8brmlVfa9PnTqljIwMJSQk\n",

"KDExUWlpaT6fZ3To0CHdfffdio+PV4cOHbR+/foATR8aLvbvPT09XZ06dVJSUpLuuOMOffrpp97H\n",

"OA5q1qV+5khSTk6OHA6Hli9f7l3GcVCzLvYcxMXFqV27dkpKSlJSUpIWL17sfSwojwMLV4V//OMf\n",

"VklJiRUbG2t9+umnP7rcsiyrR48eVk5OjmVZlvXWW29Zt956q7mBQ1BV3+uTJ09aK1eutM6ePWtZ\n",

"lmXNnj3b6tatm/dr7r//fuvJJ5+0LMuyNm3aZLVq1co6ffq04clDx8X+vX/77bfePy9dutTq1KmT\n",

"9z7HQc261M+cvXv3WrfddpuVmppqLVu2zLuc46BmXew5qOo5+V4wHgcEyFXmYv/Afri8rKzMatiw\n",

"ofXdd99ZlmVZZ8+etZo3b2599dVXhiYNXZc6yDdv3mzFxsZ679evX98qLS313u/SpYuVl5dn84Sh\n",

"71LPQU5OjpWYmGhZFseBnX74HHg8HqtXr17Wli1brG7duvkECMeBPaobIMF6HPASTJAqKSlRy5Yt\n",

"FRFx7r3kHA6HYmJiVFxcHODJQtusWbPUv39/SdKRI0f03XffqUWLFt7H4+LieA5sMnz4cLVu3VqT\n",

"Jk3Sq6++KonjwKQZM2bo9ttvV3Jyss9yjgOzhg8fro4dO+qBBx7Q4cOHJQXvcUCAANU0bdo0FRYW\n",

"Kjs7O9Cj1EoLFy5USUmJpk6dqgkTJgR6nFpl165dWrJkiZ544olAj1KrrV+/Xp999pm2bdumpk2b\n",

"asSIEYEe6YoQIEHq/E8blnTJTxvGlXv22We1dOlSvf/++6pXr54kKSoqShERETp48KB3vaKiIp4D\n",

"m40YMUL5+fk6cuQIx4EhH330kYqKihQfH6+4uDht2LBBmZmZmjt3LseBQd9/T+vUqaNx48bpo48+\n",

"khS8/x8QIEGKTxs2Z8aMGVq0aJHy8vLkcrl8Hhs8eLBefPFFSdLmzZt14MABdevWLQBThq7y8nJ9\n",

"88033vvLly9XVFSUmjRpwnFgyOjRo1VaWqqioiIVFRUpNTVV8+fP1+jRoyVxHJhw4sQJlZeXe+8v\n",

"WrRInTt3lhTE/x8E+BoU/L/MzEyrVatWVnh4uHXddddZN9xwwyWXW5Zl7d6920pNTbXi4+Ot5ORk\n",

"67PPPgvU+CGhqu91SUmJJclq06aNlZiYaCUmJlopKSnerzl48KCVlpZmtW3b1rrpppustWvXBvBv\n",

"EPyqeg6KioqsLl26WB06dLA6depk9erVy+dCPI6DmnWpnznf++FFqBwHNauq52DPnj1WUlKS1bFj\n",

"R6tDhw5Wv379rL1793q/JhiPAz6MDgAAGMdLMAAAwDgCBAAAGEeAAAAA4wgQAABgHAECAACMI0AA\n",

"AIBxBAgAADCOAAEAAMYRIAAAwDgCBAAAGPd/aHIFwFsDhiIAAAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-5192bf86-1834-47aa-9189-0a7474ee7f0c\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-5192bf86-1834-47aa-9189-0a7474ee7f0c\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x786710dd8a00>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">2-d distributions</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_33.plot(kind='scatter', x='Index', y='Height(Inches)', s=32, alpha=.8)\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-46e9e218-408e-425d-9f96-e01e96711c43\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAA0Z0lEQVR4nO3dfXBW9Z3//9d1nZOcK80FCASSFpZEkYjcSNJyl3aprMAWXEbb\n",

"bikdCPaGddftoMvS7iozOr35VlKnFAdldqGd1LWNstDW7XS2Aq2o6BYSYoUi2P5sYm7AkhsIYpIm\n",

"J9e5cn5/pLlKJIFckJPrOrmej5lrlHOum3dykpPX+Xw+5/MJuK7rCgAAwCeCiS4AAAAgHoQXAADg\n",

"K4QXAADgK4QXAADgK4QXAADgK4QXAADgK4QXAADgK4QXAADgK74ML9u3b090CQAAIEF8GV7q6uoS\n",

"XQIAAEgQX4YXAACQuggvAADAVwgvAADAVwgvAADAVwgvAADAVwgvAADAVwgvAADAVwgvAADAVwgv\n",

"AADAVwgvAADAVwgvADBInZGozrXZ6oxEE10KkNLMRBcAAMmuudVWWXmt9p9sVEckqow0Qytm5ai4\n",

"KFdZYSvR5QEph5YXALiC5lZb9+8+pmcq6tVuOzKDAbXbjsoq6rTh2WM612YnukQg5RBeAOAKyspr\n",

"VdXUqglhS2Mz05VpmRqbma4JYUtVTa0qO8Iq98BwI7wAwAA6I1HtP9mokGnINPqeLk0jKMs0tO9U\n",

"A2NggGFGeAGAAbTZjjoiUaWb/Z8qLTOojq6o2mxnmCsDUhvhBQAGELZMZaQZ6nK6+91vO93KSDcU\n",

"trj3ARhOhBcAGEAozdDyWdnqdKJyon0DjBPtlu1EtWJmjkJpRoIqBFITlwsAcAXrivJUUXNBVU2t\n",

"skxDlhmU7fQEl2kTR6m4KDfRJQIpx7OWl/Pnz6ugoCD2yM/Pl2maamlp0Re/+EXl5+drzpw5+tjH\n",

"PqbKykqvygCA65IVtrRjTaGKF+QqHDLldLsKh0wVL8jVk2sKmecFSADPWl7Gjx+v48ePx/69detW\n",

"HTp0SOPGjdOnPvUpff/735dpmvrf//1frVq1SrW1tV6VAgDXJStsaeOyfN23eKrabEdhy6SrCEig\n",

"YRvzUlpaqvXr10uS7rrrLplmT25auHCh3nnnHTkOo/UBJLdQmqGssEVwARJsWMa8HD58WBcuXNDK\n",

"lSsv27d9+3bdeeedsTDzfrZty7b7zmAZjTKnAgAAqWpYWl5KS0t1zz33XBZQysrKtHfvXn3ve98b\n",

"8LUlJSUaM2ZMn8fRo0e9LhkAACSpgOu6rpcf0NbWpg9+8IOqrKzU9OnTY9v37Nmjhx9+WAcPHtSU\n",

"KVMGfH1/LS+PPPKItm/f7lnNAAAgeXnebbRnzx7NmTOnT3DZu3evHn74Yb3wwgtXDC6SZFmWLKvv\n",

"aH7DoL8ZAIBU5Xl4KS0t1b333ttn29q1a5WTk6O77747tu3gwYMaP3681+UAAACf8zy8HD58+LJt\n",

"kUjE648FAAAjFMsDAAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAA\n",

"XyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8\n",

"AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAA\n",

"XyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAXyG8AAAAX/EsvJw/f14F\n",

"BQWxR35+vkzTVEtLi7Zs2aJbbrlFwWBQP/vZz7wqAQAAjECmV288fvx4HT9+PPbvrVu36tChQxo3\n",

"bpyWLl2qz33uc/rSl77k1ccDAIARyrPw8n6lpaUqKSmRJM2fP3/Qr7NtW7Zt99kWjUaHtDYAAOAf\n",

"wzLm5fDhw7pw4YJWrlwZ92tLSko0ZsyYPo+jR496UCUApI7OSFTn2mx1RrgYhP8MS8tLaWmp7rnn\n",

"Hplm/B+3efNmbdq0qc+2Rx55ZKhKA4CU0txqq6y8VvtPNqojElVGmqEVs3JUXJSrrLCV6PKAQfE8\n",

"vLS1tWnv3r2qrKy8ptdbliXL6vsLZRjGUJQGACmludXW/buPqaqpVSHTULoZVLvtqKyiTuU1Ldqx\n",

"ppAAA1/wvNtoz549mjNnjqZPn+71RwEArqCsvFZVTa2aELY0NjNdmZapsZnpmhC2VNXUqrIjdYku\n",

"ERgUz8NLaWmp1q9f32fbt771LU2ePFlHjhzRP/zDP2jy5Mlqbm72uhQASFmdkaj2n2xUyDRkGn1P\n",

"/aYRlGUa2neqgTEw8AXPu40OHz582baHH35YDz/8sNcfDQD4szbbUUckqnSz/2tWywyqoyuqNttR\n",

"KI2ueSQ3ZtgFgBQQtkxlpBnqcrr73W873cpINxS2hm0GDeCaEV4AIAWE0gwtn5WtTicqJ9o3wDjR\n",

"btlOVCtm5tDqAl8gYgNAilhXlKeKmguqamqVZRqyzKBspye4TJs4SsVFuYkuERgUWl4AIEVkhS3t\n",

"WFOo4gW5CodMOd2uwiFTxQty9SS3ScNHaHkBgBSSFba0cVm+7ls8VW22o7Bl0lUE3yG8JInOSJQT\n",

"CYBhE0ozONfAtwgvCcZU3QAAxIcxLwnUO1X3MxX1arcdmcFAbKruDc8e07k2++pvAgBAiiG8JBBT\n",

"dQMAED/CS4IwVTcAANeG8JIg8UzVDQAA/oLwkiBM1Q0AwLUhvCQIU3UDAHBtuKxPIKbqBgAgfrS8\n",

"JBBTdQMAED9aXhKMqboBAIgP4SVJMFU3AACDQ7cRAADwFcILAADwFcILAADwFcILAADwFcILAADw\n",

"FcILPNcZiepcm80ikwCAIcGt0vBMc6utsvJa7T/ZqI5IVBlphlbMylFxUS4T8AEArhktL/BEc6ut\n",

"+3cf0zMV9Wq3HZnBgNptR2UVddrw7DGda7MTXSIAwKcIL/BEWXmtqppaNSFsaWxmujItU2Mz0zUh\n",

"bKmqqVVlR+oSXSIAwKcILxhynZGo9p9sVMg0ZBp9f8RMIyjLNLTvVANjYAAA14TwgiHXZjvqiESV\n",

"bvb/42WZQXV0RdVmO8NcGQBgJCC8YMiFLVMZaYa6nO5+99tOtzLSDYUtxosDAOJHeMGQC6UZWj4r\n",

"W51OVE60b4Bxot2ynahWzMxhIUoAwDXh0heeWFeUp4qaC6pqapVlGrLMoGynJ7hMmzhKxUW5iS4R\n",

"AOBTtLzAE1lhSzvWFKp4Qa7CIVNOt6twyFTxglw9uaaQeV5w3Zj8EEhdtLzAM1lhSxuX5eu+xVPV\n",

"ZjsKWyZdRbhuTH4IgPACz4XSDEILhkTv5IdVTa0KmYbSzWBs8sPymhbtoFUPSAl0GwHwDSY/BCB5\n",

"GF7Onz+vgoKC2CM/P1+maaqlpUVNTU1avny5pk2bplmzZumVV17xqgx4hPEGGG5Mfgigl2fdRuPH\n",

"j9fx48dj/966dasOHTqkcePG6Utf+pIWLlyo/fv3q7KyUp/61KdUU1OjtLQ0r8rBEGG8ARIlnskP\n",

"6aYERrZhG/NSWlqqkpISSdLevXtVVVUlSZo3b54+9KEP6dChQ1q6dOllr7NtW7bddxG/aJQrq0Rg\n",

"vAESqXfyw3bbUWY/P2a2061wyGTyQyAFDMuYl8OHD+vChQtauXKlzp8/r0gkopycnNj+vLw81dfX\n",

"9/vakpISjRkzps/j6NGjw1E23ofxBkgkJj8E0GtYwktpaanuuecemWb8V0SbN2/WxYsX+zzmz5/v\n",

"QZW4EsYbIBmsK8rTzRNHqbnNVkt7l9ptRy3tXWpus5n8EEghnrevtrW1ae/evaqsrJTUMxbGNE01\n",

"NDTEWl9qa2s1ZcqUfl9vWZYsq28bsWFwZTXcGG+AZNA7+WHZkTrtO9Wgjq6owiFTq2ZOZtwVkEI8\n",

"Dy979uzRnDlzNH369Ni2VatWaefOnfr617+uyspKvfPOO7r99tu9LgXXgfEGSBZMfgjA8780paWl\n",

"uvfee/tse+yxx7Ru3TpNmzZN6enpKisr406jJNc73uCZino50e4+XUe94w1WzZzMHxEMGyY/BFKX\n",

"5+Hl8OHDl23Lzs7WL3/5S68/GkOMxRYBAMmAGXYxaCy2CABIBgxQQFwYbwAASDTCC64J4w0AAIlC\n",

"t9EwSda1gJK1LgAABkLLi8eSdS2gZK0LAICroeXFQ71rAT1TUa9225EZDMTWAtrw7DGda7Ov/iYp\n",

"VNdAaB0CAFyKlhcPXboWUO+8KJlWz7wovWsBbVyWT10DoHXIO52RKAOuAfgW4cUjg10L6L7FU4f1\n",

"j0ey1vV+rGDtDQIhgJGAbqN+DEU3RTxrAQ2nZK3r/VjBeuj5rbsQAAZCy8slhvKqNFnXAkrWui7l\n",

"l9Yhv/FLdyEAXA0tL3821FelvWsBdTpROdHuPvt61wJaMTNn2P/4Jmtdl/JL65CfDDYQMigagB8Q\n",

"Xv7Mi26KdUV5unniKDW32Wpp71K77ailvUvNbXZC1wJK1rp69bYOdTnd/e63nW5lpBusYB0HAiGA\n",

"kYTwIu+uSpN1LaBkrauXH1qH/IZACGAk4Uyl+K5K4/2DmaxrASVrXb1YwXpo9QbCZyrq5US7+4T0\n",

"3kC4aubkpPoZAICBEF40PINYk3UtoGStq7d1qOxInfadalBHV1ThkKlVMydzW+81IhACGCkIL+Kq\n",

"NFkle+uQ33gZCJn0DsBwIrz8GVelyStZW4f8aKgDIZPeAUgEBuz+WbIPYgWGUijNUFbYuu7gwqR3\n",

"ABKBlpdL0E0BDB6T3gFIFFpe+jEUV6XASMakdwASifACIG5MegcgkQgvAOLGpHcAEonwAiBuzIIM\n",

"IJG4LAJwTZheAECi0PIC4JowvQCARKHlBcA1Y3oBAIlAeAFw3ZgFGcBwotsIAAD4CuEFAAD4CuEF\n",

"AAD4yjWHl66urqGsAwAAYFDiCi8vv/yyPve5z2nChAkKhUJKT0/Xhz/8YW3ZskUtLS1e1QjAZzoj\n",

"UZ1rs1nbCIAnBn230Z133qlQKKTPfe5z+s53vqOcnBx1dnbqd7/7nfbv36877rhD3/72t7V8+XIv\n",

"6wWQxJpbbZWV12r/yUZ1RKLKSDO0YlaOiotymfcFwJAJuK7rDuaJb7zxhmbPnj3g/kgkopqaGuXn\n",

"5w9ZcQPZtGmTtm3b5vnnABi85lZb9+8+pqqmVoVMQ+lmUF1OtzqdqG6eOEo7mLgOwBAZdLdRf8HF\n",

"dV21trZKktLS0i4LLrZta8OGDZo2bZpmz56t4uJiSdL+/fs1d+5c3XbbbVq4cKF++9vfXs/XACAJ\n",

"lJXXqqqpVRPClsZmpivTMjU2M10TwpaqmlpVdqQu0SUCGCHiHrC7fv16vfvuu+rq6lJBQYGys7P1\n",

"H//xH/0+96GHHlIgENBbb72lN954Q1u3btWFCxe0du1aPf300zpx4oS+853vaO3atdf9hQBInM5I\n",

"VPtPNipkGjKNvqcV0wjKMg3tO9XAGBgAQyLu8PKb3/xGN9xwg/bv36/CwkI1NDRo586dlz2vvb1d\n",

"paWlevTRRxUIBCRJOTk5qq6u1vjx4zVz5kxJ0qJFi1RfX6/XX3/9Or8UAInSZjvqiESVbvZ/SrHM\n",

"oDq6omqznWGuDMBIFHd46R0i8+qrr2rlypUaPXq0DOPyacGrq6s1btw4bdmyRXPnztWiRYt08OBB\n",

"TZs2TefPn9fhw4clST//+c/V2tqq2trafj/Ptm299957fR7RKFdvQDIJW6Yy0gx1Od397redbmWk\n",

"GwpbrEgC4PrFHV5ycnL0z//8z/rxj3+spUuXKhKJ9BsmHMdRXV2dZsyYoddee01PPPGEVq9erc7O\n",

"Tv3kJz/R5s2b9ZGPfES//OUvNWPGDJlm/ye1kpISjRkzps/j6NGj8X+lADwTSjO0fFa2Op2onGjf\n",

"AONEu2U7Ua2YmcP6RwCGxKDvNup17tw5lZWVaeHChVq4cKFqa2v18ssv6wtf+MJlz8vOzlZXV1es\n",

"ZWbevHkqKSnR0qVLY8+zbVs5OTmqrKzUzTfffNnn2bYt27b7bHvkkUe0ffv2eMoG4LFzbbY2PNtz\n",

"t5FlGrLMoGynJ7hMmzhKT3K3EYAhEnfLS1ZWVqwFRZImTZqkNWvW9Pu8JUuW6MCBA5Kkmpoa1dTU\n",

"6NZbb9XZs2djz/t//+//6Y477ug3uEiSZVkaPXp0n0d/3VQAEisrbGnHmkIVL8hVOGTK6XYVDpkq\n",

"XpBLcAEwpOLugP7JT36ir3zlKwoEAqqtrdWbb76pzZs36/nnn7/suTt37tT69ev14IMPKhgMateu\n",

"XZo0aZLuvfdevfrqq3IcR0VFRSotLR2SLwZAYmWFLW1clq/7Fk9Vm+0obJl0FQEYcnGHl5KSEr3+\n",

"+uuxrp85c+aorq7/+RtuuukmvfTSS5dt//73vx/vxwLwkVCaQWgB4Jm4u40Mw9D48eP7bEtPTx+y\n",

"ggAAAK4k7vAyatQoNTY2xuZuOXjwoMaNGzfkhQFIDBZVBJDs4u42euyxx7RixQq9/fbb+uu//mvV\n",

"1NToF7/4hRe1ARhGLKoIwC/iDi9z587VSy+9pMOHD8t1XX30ox/VDTfc4EFpAIZLf4sqttuOyirq\n",

"VF7TwqKKAJLKNU13OWbMGK1YsWKoawGQIJcuqti7NlGm1TPBXO+iihuXeb9iPAAMRtxjXvbv36/p\n",

"06crPT1dhmEoGAwy7wrgYyyqCMBv4g4vDzzwgLZv365z587pvffeU2trq9577z0vagMwDFhUEYDf\n",

"xN1tNHr0aH3iE5/wohYACdC7qGK77Sizn2EtttOtcMhkUUUASSPulpeVK1fqZz/7mQelAEgEFlUE\n",

"4DeDvpQaO3asAoGAXNfVxYsXlZGRIcuy5LquAoGAWlpavKwTgIfWFeWpoubCgIsqFhflJrpEAIgZ\n",

"dHg5fvy4h2UASKTeRRXLjtRp36kGdXRFFQ6ZWjVzMvO8AEg6gw4vubk9V1719fWaOHGiQqGQJKmz\n",

"s1PNzc3eVAdg2LCoIgC/iHvMy2c+85k+/3Zd97JtAPwrlGYoK2wRXAAkrbjDS1dXV6zVRZIyMjJk\n",

"2/aQFgUAADCQuMNLIBBQU1NT7N8NDQ1yXXdIiwIAABhI3BM3PPDAAyoqKtK6deskSWVlZfra1742\n",

"5IUBAAD0J+7w8sUvflE33nijnn/+eUnSU089pUWLFg15YUAq6oxEGSwLAFdxTVNmLl68WIsXLx7i\n",

"UoDU1dxqq6y8VvtPNqojElVGmqEVs3K4TRkA+hF3eKmtrdVjjz2m6upqOc5f1jp58cUXh7QwIFU0\n",

"t9q6f/cxVTW1KmQaSjeDarcdlVXUqbymRTvWFBJgAOAScYeXz372s1qyZIk2bNjAatLAECgrr1VV\n",

"U6smhK3Yqs6ZVs/U/FVNrSo7UqeNy/ITXCUAJI+4w0tnZ6dKSkq8qAVIOZ2RqPafbFTINGLBpZdp\n",

"BGWZhvadatB9i6cyBgYA/izuW6VnzZql+vp6L2oBUk6b7agjElW62f+vomUG1dHVM4gXANAj7paX\n",

"5uZmzZkzR0VFRX0mq3vuueeGtDAgFYQtUxlphtptR5n9DGuxnW6FQ6bC1jWNrQeAESnuM2JxcbGK\n",

"i4u9qAVIOaE0Q8tnZeuZino50e4+XUdOtGdV51UzJ9NlBACXiDu8fP7zn/eiDiBlrSvKU0XNBVU1\n",

"tcoyDVlmULbTE1ymTRyl4qLcRJcIAEll0OFl06ZNV9y/bdu26y4GSEVZYUs71hSq7Eid9p1qUEdX\n",

"VOGQqVUzJzPPCwD0Y9DhZcyYMV7WAaS0rLCljcvydd/iqcywCwBXMejwwvpFgPdCaQahBQCuYtC3\n",

"SldUVFxxf0dHh958883rLggAAOBKBh1evvvd72rZsmV66qmn9Oabb+r8+fN655139OKLL+rf//3f\n",

"VVRUpMbGRi9rBQAAGHy30d69e1VZWaldu3bp0Ucf1ZkzZ5SZmanbbrtNf//3f69f//rXyszM9LJW\n",

"AACA+G6VnjdvnubNm+dVLQAAAFcV9/IAX/7ylwe1DQAAwAtxh5fy8vLLth0+fHhIigEAALiaQXcb\n",

"7dmzR//93/+tmpoaffrTn45tv3jxosLhsCfFAQCAgXVGoik5N9Sgw8v06dN199136/XXX9fdd98d\n",

"2z569GgtWbKk39fYtq2vfOUrOnDggEKhkObMmaOysjI9//zzevjhh9Xd3S3HcfRv//ZvLDsAAMAg\n",

"NbfaKiuv1f6TjeqIRJWRZmjFrJyUmZU74LquG88LmpubNWHChEE991//9V/lOI6eeOIJBQIBNTQ0\n",

"KDs7W+PHj9fLL7+s2267TbW1tZo+fbqam5s1atSoQb3vpk2bWI4AAJCSmltt3b/7mKqaWhUyDaWb\n",

"QXU53ep0orp54ijtWFN4XQHGD605cS/MmJaWpscee0zV1dVyHCe2/Qc/+EGf57W3t6u0tFRnzpxR\n",

"IBCQJOXk5Mh1XQUCAb377ruSpPfee0/jx4+XZfX/jbZtW7Zt99kWjUbjLRsAgBGhrLxWVU2tmhC2\n",

"YivRZ1o9K9FXNbWq7EidNi7Lj/t9/dSaE3d4+cxnPqMJEyaoqKhIhjFwIquurta4ceO0ZcsWvfDC\n",

"C8rIyNDXv/51LVmyRHv27NGnP/1pZWZm6sKFC3ruueeUnp7e7/uUlJToG9/4Rp9tCxcujLdsAAB8\n",

"rzMS1f6TjQqZRiy49DKNoCzT0L5TDbpv8dS4Wk36a81ptx2VVdSpvKblultzhlrc4eXs2bN64YUX\n",

"rvo8x3FUV1enGTNm6Nvf/raOHTumZcuW6dSpU/rWt76l5557Th//+MdVWVmpu+66S2+88YaysrIu\n",

"e5/NmzdftqL1I488Em/ZAAD4XpvtqCMSVbrZ/83ClhlUR1dPt0884cWr1hyvxH2r9NSpU2NdPlcy\n",

"ZcoUBYNBrV27VpJUWFioG2+8UT/60Y/0xz/+UR//+Mcl9Ux8N3nyZB07dqzf97EsS6NHj+7zuFKL\n",

"DwAAI1XYMpWRZqjL6e53v+10KyPdUNgafNvEYFtzOiPJM2Rj0F9db+vHBz7wAX34wx/W8uXLFQqF\n",

"YvvfP4A2KytLS5Ys0YEDB3TnnXeqpqZGNTU1WrVqlb7xjW/od7/7nW699VZVVVWpurpat9xyyxB9\n",

"SQAAjEyhNEPLZ2XrmYp6OdHuPmHDiXbLdqJaNXNyXK0uXrXmeGnQ4WXMmDGx/956662Des3OnTu1\n",

"fv16PfjggwoGg9q1a5dyc3P1ve99T5/97GcVDAbV3d2tHTt2aMqUKdf2FQAAkELWFeWpouaCqppa\n",

"ZZmGLDMo2+kJLtMmjlJxUW5c79fbmtNuO8rsZ1iL7XQrHDLjas3xWty3SicDbpUGAKSyc222yo7U\n",

"ad+pBnV0RZWRbmjFzGu/M+jxX/1/eqaivs+YF6mnNae5zVbxgtykGvMSd4z65je/edm2G264QUVF\n",

"RSzaCADAMMgKW9q4LF/3LZ46JHOyDHVrjtfiHrD7u9/9Tv/5n/+p06dP68yZM9q5c6defvllrV27\n",

"Vk888YQXNQIAgH6E0gxlha3rHouSFba0Y02hihfkKhwy5XS7CodMFS/I1ZNJdpu0dA0tLxcuXNDx\n",

"48eVnZ0tSWpsbNS6detUXl6uRYsW6YEHHhjyIgEAgLeGujXHS3GHlzNnzsSCiyRlZ2frj3/8o8aN\n",

"G6e0tLQhLQ4AAAyvUJqRtKGlV9zdRpMmTdI3vvENnT59WqdPn9Y3v/lNfehDH1I0Go0tAwAAAOCV\n",

"uMPL008/rVOnTqmgoEAFBQU6efKk/uu//kuRSEQ//OEPvagRAAAgJu5uo5ycHO3du7fffbNnz77u\n",

"ggAAAK5k0OHl0KFDuv322/Xzn/+83/133XXXkBUFAAAwkEGHl7KyMt1+++16/PHHL9sXCAQILwAA\n",

"YFgMOrx8//vflyS99NJLnhUDAABwNXEP2HUcR9/97nf15S9/WZJUXV2tF198ccgLSyadkajOtdlJ\n",

"taImBodjBwAjT9wDdjds2KBoNKr/+7//kySNHz9eq1ev1muvvTbkxSVac6utsvJa7T/ZqI5IVBlp\n",

"hlbMuva1IzB8OHYAMHLFHV7Ky8t1/PhxFRYWSupZ1ygSiQx5YYnW3Grr/t3HVNXUqpBpKN0Mqt12\n",

"VFZRp/KaFu1IwumS0YNjBwAjW9zdRqFQqM+/o9Gouru7h6ygZFFWXquqplZNCFsam5muTMvU2Mx0\n",

"TQhbqmpqVdmRukSXiAFw7ABgZIs7vNx2220qKytTd3e3qqqq9E//9E9avHixB6UlTmckqv0nGxUy\n",

"jT5Lg0uSaQRlmYb2nWpgHEUS4tgBwMgXd3jZtm2bXn31VTU0NOhjH/uYDMPQY4895kVtCdNmO+qI\n",

"RJVu9v/tscygOrqiarOdYa4MV8OxA4CRb9BjXi6dnO7v/u7vdOedd0rqmePlhRdeGFHzvIQtUxlp\n",

"htptR5n9DI2wnW6FQ6bCVtxDhuAxjh0AjHyDPoNfOjndb37zG82dO1eu60oaeZPUhdIMLZ+VrWcq\n",

"6uVEu/t0PzjRbtlOVKtmTk76VTdTUaofu85INOmXsgeA6zXo8HLp5HSFhYUjcm6XS0/864ryVFFz\n",

"QVVNrbJMQ5YZlO30/PGbNnGUiotyE10uBpCKx45bwwGkkmtqOw8EAkNdR0INdOL/5t0z9fyJs9p3\n",

"qkEdXVGFQ6ZWzZzMH4QklxW2tGNNocqO1KXEsePWcACpJuU7/gdz4r9v8VSa4n0mK2xp47L8lDh2\n",

"l94a3ttNlmn1dJP13hq+cVl+gqsEgKEz6PBy4sSJ2P93dHTojTfeiI15kXpuofajwZ74R+ofvpEu\n",

"lGaM6GM32FvD71s8dUR/HwCklkGHl7vvvrvPvy8doBsIBPT2228PXVXDhBM//C6eW8P5GQYwUgw6\n",

"vNTU1HhZR0Jw4offcWs4gFQU9yR1I0nvib/L6X95A9vpVka6wYkfSav31vBOJyon2vfnuPfW8BUz\n",

"cwjfAEaUlA4vnPgxEqwrytPNE0epuc1WS3uX2m1HLe1dam6zR+yt4QBSW0qHF4kTP/yv99bw4gW5\n",

"CodMOd2uwiFTxQty9SS3SQMYgQLupbcM+cSmTZu0bdu2IXu/c212nzlBMtINrZjJBF/wH2bYBZAK\n",

"GMyh1JoTBCPbSL81HAAkwksfnPgBAEh+KT/mBQCQfDojUZ1rs9UZiSa6FCQhWl4AAEmDRUYxGLS8\n",

"AACSQu9ac89U1KvddmQGA7G15jY8e0zn2uxEl4gkQXgBkhBN5khFl641NzYzXZmWqbGZ6ZoQtmJr\n",

"zQES3UZAUqHJHKmKteYQD09bXmzb1oYNGzRt2jTNnj1bxcXFOn/+vAoKCmKP/Px8maaplpYWL0sB\n",

"kh5N5khl8aw1B3ja8vLQQw8pEAjorbfeUiAQUENDg8aPH6/jx4/HnrN161YdOnRI48aN87IUIOld\n",

"2mTee+WZafUsVdHbZL5xWX6CqwS8wSKjiIdnLS/t7e0qLS3Vo48+qkAgIEnKycm57HmlpaVav379\n",

"gO9j27bee++9Po9olHEAGFkG22TOGBiMVKw1h3h4Fl6qq6s1btw4bdmyRXPnztWiRYt08ODBPs85\n",

"fPiwLly4oJUrVw74PiUlJRozZkyfx9GjR70qG0gImswB1prD4HkWXhzHUV1dnWbMmKHXXntNTzzx\n",

"hFavXq3GxsbYc0pLS3XPPffINAduBty8ebMuXrzY5zF//nyvygYSorfJvMvp7ne/7XQrI92gyRwj\n",

"GouMYrA8OxNOmTJFwWBQa9eulSQVFhbqxhtv1BtvvKHs7Gy1tbVp7969qqysvOL7WJYly+r7A2sY\n",

"NBtiZOltMn+mol5OtLtP11Fvk/mqmZNpMseIx1pzGAzPWl6ysrK0ZMkSHThwQJJUU1Ojmpoa3Xrr\n",

"rZKkPXv2aM6cOZo+fbpXJQC+QpM58BehNENZYYvggn552ga9c+dOrV+/Xg8++KCCwaB27dqlSZMm\n",

"SerpMrr33nu9/HjAV3qbzMuO1GnfqQZ1dEUVDplaNXMy87wAwCUCruu6iS4iXps2bdK2bdsSXQbg\n",

"mc5IlCZzABgAo/+AJBRKMwgtADAA1jYCAAC+QngBAAC+QngBAAC+QngBAAC+QngBAAC+QngBAAC+\n",

"QngBAAC+QngBAAC+QngBAAC+QngBAAC+QngBAAC+QngBAAC+QngBAAC+QngBAAC+QngBAAC+QngB\n",

"AAC+QngBAKSczkhU59psdUaiiS4F18BMdAEAAAyX5lZbZeW12n+yUR2RqDLSDK2YlaPiolxlha1E\n",

"l4dBouUFAJASmltt3b/7mJ6pqFe77cgMBtRuOyqrqNOGZ4/pXJud6BIxSIQXAEBKKCuvVVVTqyaE\n",

"LY3NTFemZWpsZromhC1VNbWq7EhdokvEIBFeAAAjXmckqv0nGxUyDZlG3z99phGUZRrad6qBMTA+\n",

"QXgBAIx4bbajjkhU6Wb/f/YsM6iOrqjabGeYK8O1ILwAAEa8sGUqI81Ql9Pd737b6VZGuqGwxX0s\n",

"fkB4AQCMeKE0Q8tnZavTicqJ9g0wTrRbthPVipk5CqUZCaoQ8SBiAgBSwrqiPFXUXFBVU6ss05Bl\n",

"BmU7PcFl2sRRKi7KTXSJGCRaXkYoJmACgL6ywpZ2rClU8YJchUOmnG5X4ZCp4gW5enJNIfO8+Agt\n",

"LyMMEzABwMCywpY2LsvXfYunqs12FLZMuop8iPAygvROwFTV1KqQaSjdDMYmYCqvadEOriwAQFLP\n",

"GBhCi3/RbTSCMAETACAVEF5GCCZgAgCkCsLLCMEETACAVEF4GSGYgAkAkCoILyMEEzABAFKFp+HF\n",

"tm1t2LBB06ZN0+zZs1VcXHzF7bg+64rydPPEUWpus9XS3qV221FLe5ea22wmYAIAjBie9iE89NBD\n",

"CgQCeuuttxQIBNTQ0HDF7bg+vRMwlR2p075TDeroiiocMrVq5mTmeQEAjBgB13VdL964vb1dH/zg\n",

"B3XmzBmNHj36qtsHYtu2bNvus+2RRx7R9u3bh7zmkaQzEmUCJgDAiORZt1F1dbXGjRunLVu2aO7c\n",

"uVq0aJEOHjw44PaBlJSUaMyYMX0eR48e9arsESOUZigrbBFcAAAjjmfhxXEc1dXVacaMGXrttdf0\n",

"xBNPaPXq1ero6Oh3e2NjY7/vs3nzZl28eLHPY/78+V6VDQAAkpxnY16mTJmiYDCotWvXSpIKCwt1\n",

"44036vTp0/1uf+ONN5SdnX3Z+1iWJcvqO1bDMGhNAAAgVXnW8pKVlaUlS5bowIEDkqSamhrV1NSo\n",

"qKio3+233nqrV6UAAIARxNO7jXbu3Kn169frwQcfVDAY1K5duzRp0qQBtwMAAFyNp+Hlpptu0ksv\n",

"vTTo7QAAAFfDDLsAAMBXCC8AAMBXCC8AAMBXCC8AAMBXCC8AAMBXCC8AAMBXCC8AAMBXCC8AAMBX\n",

"CC8AAMBXCC8AAMBXCC/wnc5IVOfabHVGookuBQCQAJ6ubQQMpeZWW2Xltdp/slEdkagy0gytmJWj\n",

"4qJcZYWtRJcHABgmtLzAF5pbbd2/+5ieqahXu+3IDAbUbjsqq6jThmeP6VybnegSAQDDhPACXygr\n",

"r1VVU6smhC2NzUxXpmVqbGa6JoQtVTW1quxIXaJLBAAME8ILkl5nJKr9JxsVMg2ZRt8fWdMIyjIN\n",

"7TvVwBgYAEgRhBckvTbbUUckqnSz/x9XywyqoyuqNtsZ5soAAIlAeEHSC1umMtIMdTnd/e63nW5l\n",

"pBsKW4w/BzD8uANy+HG2R9ILpRlaPitbz1TUy4l29+k6cqLdsp2oVs2crFCakcAqAaQa7oBMHMIL\n",

"fGFdUZ4qai6oqqlVlmnIMoOynZ7gMm3iKBUX5Sa6RAAppPcOyKqmVoVMQ+lmMHYHZHlNi3asKSTA\n",

"eIhuI/hCVtjSjjWFKl6Qq3DIlNPtKhwyVbwgV09ykgAwzLgDMrFoeYFvZIUtbVyWr/sWT1Wb7Shs\n",

"mXQVARh2g70D8r7FUzlHeYTwAt8JpRmcEAAkTDx3QHKu8gbdRgAAxIE7IBOP8AIAQBx674DsdKJy\n",

"on0DTO8dkCtm5tDq4iFiIQAAceIOyMSi5QUAgDhxB2Ri0fICAMA14A7IxCG8AABwHbgDcvjRbQQA\n",

"AHyF8AIAAHyF8AIACcSKxED8GPMCAAnAisTAtaPlBQCGWe+KxM9U1KvddmQGA7EViTc8e0zn2uxE\n",

"lwgkNcILAAwzViQGrg/hBQCG0WBXJGYMDDAwT8OLbdvasGGDpk2bptmzZ6u4uFiSlJeXp1tuuUUF\n",

"BQUqKCjQnj17vCwDAJJGPCsSA+ifpwN2H3roIQUCAb311lsKBAJqaGiI7duzZ48KCgq8/HgASDq9\n",

"KxK3244y+xmXazvdCodMViQGrsCz34729naVlpbqzJkzCgQCkqScnJy438e2bdl238Fr0SjNqQD8\n",

"qXdF4mcq6uVEu/t0HfWuSLxq5mRmbAWuwLNuo+rqao0bN05btmzR3LlztWjRIh08eDC2/5577tHs\n",

"2bO1fv16NTc3D/g+JSUlGjNmTJ/H0aNHvSobADy3rihPN08cpeY2Wy3tXWq3HbW0d6m5zWZFYmAQ\n",

"PAsvjuOorq5OM2bM0GuvvaYnnnhCq1evVmNjo1555RWdOHFCr7/+urKysvT5z39+wPfZvHmzLl68\n",

"2Ocxf/58r8oGAM+xIjFwfQKu67pevPG5c+eUnZ2trq4uGUZP8+e8efNUUlKipUuXxp539uxZ5efn\n",

"q7W1ddDvvWnTJm3btm3IawaA4dYZibIiMRAnz1pesrKytGTJEh04cECSVFNTo5qaGt1666169913\n",

"Y8/bvXu3CgsLvSoDAJJaKM1QVtgiuABx8HQ4+86dO7V+/Xo9+OCDCgaD2rVrl2zb1sqVKxWNRuW6\n",

"rm666Sb98Ic/9LIMAAAwgngaXm666Sa99NJLl20/duyYlx8LAABGMGbYBQAAvkJ4AQAAvkJ4AQAA\n",

"vkJ4AQAAvkJ4AQAAvkJ4AQAAvkJ4AQAAvkJ4AQAAvkJ4AQAAvkJ4AQAAvkJ4AQAkRGckqnNttjoj\n",

"0USXAp/xdG0jAADer7nVVll5rfafbFRHJKqMNEMrZuWouChXWWEr0eXBB2h5AZIcV6cYSZpbbd2/\n",

"+5ieqahXu+3IDAbUbjsqq6jThmeP6VybnegS4QO0vABJiqtTjERl5bWqamrVhLAl0+i5fs60JCfa\n",

"raqmVpUdqdPGZfkJrhLJjpYXIAlxdYqRqDMS1f6TjQqZRiy49DKNoCzT0L5TDbQy4qoIL0ASuvTq\n",

"dGxmujItU2Mz0zUhbMWuTgG/abMddUSiSjf7/9NjmUF1dEXVZjvDXBn8hvACJBmuTjFShS1TGWmG\n",

"upzufvfbTrcy0g2FLUY04MoIL0CS4eoUI1UozdDyWdnqdKJyon0DjBPtlu1EtWJmjkJpRoIqhF8Q\n",

"XoAkw9UpRrJ1RXm6eeIoNbfZamnvUrvtqKW9S81ttqZNHKXiotxElwgfILwASYarU4xkWWFLO9YU\n",

"qnhBrsIhU063q3DIVPGCXD25ppA76TAoXLoBSWhdUZ4qai6oqqlVlmnIMoOynZ7gwtUp/C4rbGnj\n",

"snzdt3iq2mxHYcskjCMutLwASYirU6SCUJqhrLBFcEHcaHkBkhRXpwDQP8ILkORCaQahBQAuQbcR\n",

"AADwFcILAADwFcILAADwFcILAADwFcILAADwFcILAADwFcILAADwFcILAADwFcILAADwFcILAADw\n",

"lYDrum6ii4jXpz/9aeXl5SW6jJQRjUZ19OhRzZ8/X4bBNPWJxLFIDhyH5MBxSB6DPRa5ubn6l3/5\n",

"l+v+PF+GFwyv9957T2PGjNHFixc1evToRJeT0jgWyYHjkBw4DsljuI8F3UYAAMBXCC8AAMBXCC8A\n",

"AMBXCC+4Ksuy9LWvfU2WZSW6lJTHsUgOHIfkwHFIHsN9LBiwCwAAfIWWFwAA4CuEFwAA4CuEFwAA\n",

"4CuElxSVl5enW265RQUFBSooKNCePXskSX/4wx/00Y9+VPn5+Zo3b55OnToVe8217sNfPPDAA8rL\n",

"y1MgENDx48dj2734vnNMrmygYzHQ74bEsfBCZ2enPvnJTyo/P19z5szRsmXLVFVVJUlqamrS8uXL\n",

"NW3aNM2aNUuvvPJK7HVe7EtlVzoOixcv1o033hj7nXj88cdjr0vYcXCRknJzc91jx45dtv1v/uZv\n",

"3Keeesp1Xdf98Y9/7M6dO/e69+EvDh065J4+ffqy778X33eOyZUNdCwG+t1wXY6FFzo6Otxf/OIX\n",

"bnd3t+u6rvvkk0+6t99+u+u6rvvFL37R/drXvua6rusePXrUnTRpktvV1eXZvlR2peNw++23u//z\n",

"P//T7+sSdRwILymqvxN0Y2OjO2rUKDcSibiu67rd3d1udna2+4c//OGa96F/l37/vfi+c0wGb7Dh\n",

"hWMxPCorK93c3FzXdV03MzPTPXv2bGzfvHnz3F/96lee7cNfXHocrhReEnUc6DZKYffcc49mz56t\n",

"9evXq7m5WadPn9YHP/hBmaYpSQoEApoyZYrq6+uveR+uzovvO8fk+rz/d0Py5jjhctu3b9fdd9+t\n",

"8+fPKxKJKCcnJ7YvLy9P9fX1nuxDX73HoddDDz2k2bNna/Xq1Xr77bclKaHHgfCSol555RWdOHFC\n",

"r7/+urKysvT5z38+0SUBSYHfjcTZsmWLqqqqVFJSkuhSUtr7j8OPfvQj/f73v9eJEye0aNEirVy5\n",

"MsEVEl5S1pQpUyRJaWlp2rhxo1599VX91V/9lc6ePSvHcSRJruuqvr5eU6ZMueZ9uDovvu8ck2vX\n",

"3++G5M1xwl9s3bpVzz33nPbt26cPfOADGj9+vEzTVENDQ+w5tbW1mjJliif70OP9x0Hq+dmXeloN\n",

"N2zYoLffflvnz59P6HEgvKSg9vZ2vfvuu7F/7969W4WFhZo4caI+/OEPq6ysTJL005/+VJMnT9bN\n",

"N998zftwdV583zkm12ag3w3Jm+OEHtu2bdPu3bv1q1/9SjfccENs+6pVq7Rz505JUmVlpd555x3d\n",

"fvvtnu1Ldf0dB8dx1NjYGHvOT3/6U2VnZ2v8+PGSEngcBj06BiNGdXW1W1BQ4M6ePdudNWuWe9dd\n",

"d7k1NTWu67ru73//e3fhwoXutGnT3I985CPuiRMnYq+71n34i3/8x390J02a5BqG4U6cONGdOnWq\n",

"67refN85JlfW37G40u+G63IsvHD69GlXknvTTTe5c+bMcefMmePOnz/fdV3XbWhocJctW+befPPN\n",

"7owZM9wXX3wx9jov9qWygY5DW1ub+5GPfMSdNWuWe9ttt7l33HGHe/z48djrEnUcWNsIAAD4Ct1G\n",

"AADAVwgvAADAVwgvAADAVwgvADyRl5fXZ82gwfjqV7+qr3/9657UA2DkILwAAABfIbwA8NTixYv1\n",

"1a9+VYsWLdLUqVN13333xfadPXtWn/jEJzRjxgwtXbpUZ86cie2LRCJ66KGHNH/+fBUUFOizn/2s\n",

"Lly4oObmZuXl5am8vFyS9JOf/ERz5sxRR0fHsH9tABKD8ALAc9XV1XrppZd08uRJHThwQEeOHJEk\n",

"PfDAA5o/f77efPNNPf300zp48GDsNd/5zneUmZmpo0eP6vjx45o9e7YefvhhTZgwQT/60Y+0du1a\n",

"HT16VBs3btSPf/xjZWRkJOrLAzDMzEQXAGDkW716tUzTlGmaKigoUHV1tYqKinTw4EFt3bpVkjRp\n",

"0iTdddddsdf87Gc/08WLF/XTn/5UktTV1aW8vDxJ0qJFi7R+/Xp99KMf1Q9/+EPl5+cP+9cEIHEI\n",

"LwA8FwqFYv9vGEZsnZ/3CwQCsf93XVdPPvmk/vZv/7bf5x47dkwTJkzQ6dOnh7ZYAEmPbiMACbN0\n",

"6VL94Ac/kNQz/uXnP/95bN8nP/lJPf744/rTn/4kSfrTn/6kU6dOSZJ27NihCxcu6Le//a127dql\n",

"X//618NfPICEoeUFQMJs375dX/jCFzRjxgxNmjRJd9xxR2zfgw8+KNu2tWDBgliLTO+2rVu3qqKi\n",

"QhMnTlRZWZmKi4tVWVkZWywOwMjG2kYAAMBX6DYCAAC+QngBAAC+QngBAAC+QngBAAC+QngBAAC+\n",

"QngBAAC+QngBAAC+QngBAAC+QngBAAC+QngBAAC+8v8DHr5XFeYmScQAAAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-46e9e218-408e-425d-9f96-e01e96711c43\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-46e9e218-408e-425d-9f96-e01e96711c43\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_34.plot(kind='scatter', x='Height(Inches)', y='Weight(Pounds)', s=32, alpha=.8)\n",

"plt.gca().spines[['top', 'right',]].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-378ddb96-d5d5-464f-9f79-d5535a1e85f7\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAA3l0lEQVR4nO3dfXSU9Z3//1cyV3INZrjTAFGRxEqChQBBQRK1QFEUtNV+FbSl\n",

"QXG1gIosi+ds655arG2xnFo8iqeVdlvUM4hgta5bC+sNILpCgEpA0KpBkgASEm6dSZMrc81cvz/4\n",

"kTUlgRmYycw1eT7OydFcV2Z4X5Nkrlc+txmO4zgCAABwgcxkFwAAABAtggsAAHANggsAAHANggsA\n",

"AHANggsAAHANggsAAHANggsAAHANggsAAHCNtAsuTz75ZLJLAAAACZJ2waWmpibZJQAAgARJu+AC\n",

"AADSF8EFAAC4BsEFAAC4BsEFAAC4BsEFAAC4BsEFAAC4BsEFAAC4BsEFAAC4BsEFAAC4BsEFAAC4\n",

"BsEFgGs1h8I6GLTUHAonuxQAncRIdgEAEKuGgCX/xmqt3nFATaGwumV5NKk4T+Vl+cr1mckuD0AC\n",

"0eICwFUaApYeWL5Vyypq1WjZMjIz1GjZ8lfUaPYLW3UwaCW7RAAJRHAB4Cr+jdWqqg+oj89U75xs\n",

"5ZiGeudkq4/PVFV9QP4N7BAPpDOCCwDXaA6FtXrHAXkNjwxP27cvw5Mp0/Bo1c46xrwAaYzgAsA1\n",

"gpatplBY2Ub7b12mkammlrCClt3JlQHoLAQXAK7hMw11y/KoxY60e96yI+qW7ZHPZN4BkK4ILgBc\n",

"w5vl0cTifmq2w7LDbcOLHY7IssOaNCRP3ixPkioEkGj8WQLAVaaVFahi9xFV1QdkGh6ZRqYs+3ho\n",

"KezbXeVl+ckuEUAC0eICwFVyfaaenjpC5aPz5fMasiOOfF5D5aPztXjqCNZxAdIcLS4AXCfXZ2ru\n",

"hCLNGneJgpYtn2nQPQR0EQQXAK7lzfIQWIAuhq4iAADgGgQXAADgGgkNLnPmzFFBQYEyMjJUWVnZ\n",

"erygoECDBg1SSUmJSkpKtGLFitZzn332ma688koVFRVp1KhR2rlzZyJLBAAALpLQ4DJ58mS99957\n",

"ys8/eXriihUrVFlZqcrKSt1+++2tx2fOnKkZM2bo008/1Q9/+ENNnz49kSUCAAAXSWhwGTNmjPr3\n",

"7x/119fX12vLli0qLy+XJN16663as2ePqqqq2v16y7L05ZdftvkIh9mjBACAdJW0MS533HGHhg4d\n",

"qrvvvlsNDQ2SpD179uj888+XYRyf7JSRkaEBAwaotra23ed47LHH1LNnzzYfmzZt6rRrAAAAnSsp\n",

"wWX9+vXavn27PvjgA+Xm5urOO+88o+d56KGHdOzYsTYfV1xxRZyrBQAAqSIp67gMGDBAkpSVlaW5\n",

"c+eqqKhIknTRRRdp//79sm1bhmHIcRzV1ta2fv0/M01Tptl2lUyPhzUdAABIV53e4tLY2KijR4+2\n",

"fr58+XKNGDFCktS3b19ddtll8vv9kqSXX35Z/fv318CBAzu7TAAAkIIS2uIyc+ZMvf7666qrq9P1\n",

"11+v7t2764033tCtt96qcDgsx3H0ta99Tc8//3zrY5YsWaLp06drwYIF6tGjh5YuXZrIEgEAgItk\n",

"OI7jJLuIeJo3b54WLVqU7DIAAEACsHIuAABwDYILAABwDYILAMRRcyisg0FLzSEWwwQSISnToQEg\n",

"3TQELPk3Vmv1jgNqCoXVLcujScV5Ki/LV67PPP0TAIgKLS4AcJYaApYeWL5Vyypq1WjZMjIz1GjZ\n",

"8lfUaPYLW3UwaCW7RCBtEFwA4Cz5N1arqj6gPj5TvXOylWMa6p2TrT4+U1X1Afk31CS7RCBtEFwA\n",

"4Cw0h8JaveOAvIZHhqftW6rhyZRpeLRqZx1jXoA4IbgAwFkIWraaQmFlG+2/nZpGpppawgpadidX\n",

"BqQnggsAnAWfaahblkctdqTd85YdUbdsj3wmcyGAeCC4AMBZ8GZ5NLG4n5rtsOxw2/BihyOy7LAm\n",

"DcmTN4sNYIF44E8AADhL08oKVLH7iKrqAzINj0wjU5Z9PLQU9u2u8rL8ZJcIpA1aXADgLOX6TD09\n",

"dYTKR+fL5zVkRxz5vIbKR+dr8dQRrOMCxBEtLgAQB7k+U3MnFGnWuEsUtGz5TIPuISABCC4AEEfe\n",

"LA+BBUgguooAAIBrEFwAAIBrEFwAAIBrEFwAAIBrEFwAAIBrEFwAAIBrEFwAAIBrEFwAAIBrEFwA\n",

"AK7WHArrYNBScyic7FLQCVg5FwDgSg0BS/6N1Vq944CaQmF1y/JoUnGeysvy2R8qjdHiAgBwnYaA\n",

"pQeWb9Wyilo1WraMzAw1Wrb8FTWa/cJWHQxayS4RCUJwAQC4jn9jtarqA+rjM9U7J1s5pqHeOdnq\n",

"4zNVVR+Qf0NNsktEghBcAACu0hwKa/WOA/IaHhmetrcxw5Mp0/Bo1c46xrykKYILAMBVgpatplBY\n",

"2Ub7tzDTyFRTS1hBy+7kytAZCC4AAFfxmYa6ZXnUYkfaPW/ZEXXL9shnMv8kHRFcAACu4s3yaGJx\n",

"PzXbYdnhtuHFDkdk2WFNGpInb5YnSRUikYijAADXmVZWoIrdR1RVH5BpeGQambLs46GlsG93lZfl\n",

"J7tEJAgtLgAA18n1mXp66giVj86Xz2vIjjjyeQ2Vj87X4qkjWMcljdHiAgBwpVyfqbkTijRr3CUK\n",

"WrZ8pkH3UBdAcAEAuJo3y0Ng6ULoKgIAAK5BcAEAAK5BcAEAAK5BcAEAAK5BcAEAAK5BcAEAAK5B\n",

"cAEAAK5BcAEAAK5BcAEAAK5BcAEAAK5BcAEAdFnNobAOBi01h8LJLgVRYq8iAHCB5lCYjQTjqCFg\n",

"yb+xWqt3HFBTKKxuWR5NKs5TeVk+O0unOIILAKQwbrDx1xCw9MDyraqqD8hreJRtZKrRsuWvqNHG\n",

"3Yf19NQRvLYpjK4iAEhRJ26wyypq1WjZMjIzWm+ws1/YqoNBK9klupJ/Y7Wq6gPq4zPVOydbOaah\n",

"3jnZ6uMzVVUfkH9DTbJLxCkQXAAgRXGDjb/mUFirdxyQ1/DI8LS9BRqeTJmGR6t21jHmJYURXAAg\n",

"BXGDTYygZaspFFa20f7tzzQy1dRyfDwRUhPBBQBS0NncYJkp0zGfaahblkctdqTd85YdUbdsj3wm\n",

"Q0BTFd8ZAEhBJ26wjZatnHbGiVp2RD6v0eYGy0De0/NmeTSxuJ+WVdTKDkfatGbZ4YgsO6wpQ/oz\n",

"cyuF0eICACnoxA222Q7LDrdtHThxg500JK/1BstA3uhNKyvQwL7d1RC0dLixRY2WrcONLWoIWirs\n",

"213lZfnJLhGnQHABgBQVyw2WgbzRy/WZenrqCJWPzpfPa8iOOPJ5DZWPztdipkKnPLqKACBFnbjB\n",

"+jfUaNXOOjW1hOXzGpoypH+b7p9oB/LOGncJXSD/v1yfqbkTijRr3CUs7OcyBBcASGHR3GBjGcjL\n",

"zbktb5aH18RlCC4A4AKnusGeyUBewK0Y4wIALhfrQF7AzYjfAJAGppUVqGL3EVXVB2QaHplGpiz7\n",

"eGhhpgzSCS0uAJAGmCmDroIWFwBIE8yUQVdAcAGANMNMGaQzuooAAIBrJDS4zJkzRwUFBcrIyFBl\n",

"ZeVJ55cuXaqMjAy9+uqrrcfq6+s1ceJEFRYWqri4WOvXr09kiQAAwEUSGlwmT56s9957T/n5J49m\n",

"r66u1u9//3uVlpa2Of6jH/1IpaWl+uyzz7R06VJNnTpVoVAokWUCAACXSGhwGTNmjPr373/S8Ugk\n",

"onvuuUeLFy+WabYd6b5y5UrNmjVLkjRq1ChdcMEFeuedd9p9fsuy9OWXX7b5CIfZxh0AgHSVlDEu\n",

"ixYt0lVXXaXLL7+8zfFDhw4pFAopLy+v9VhBQYFqa2vbfZ7HHntMPXv2bPOxadOmhNYOxENzKKyD\n",

"QUvNIYI2AMSi02cV7dixQy+//HJcxq489NBDmjdvXptjDz/88Fk/L5AoDQFL/o3VWr3jgJpCYXXL\n",

"8mhScV6bDfMAAB3r9ODy7rvvqrq6WoWFhZKkuro6zZgxQ/v379e9994rwzBUV1fX2upSXV2tAQMG\n",

"tPtcpmme1NXk8TAFEKmpIWDpgeVbVVUfkNfwKNvIVKNly19Ro427D+tpFgkDgNPq9K6ie++9V/v3\n",

"71d1dbWqq6tVWlqq3/3ud7r33nslSVOmTNEzzzwjSdq8ebP27dunsWPHdnaZQNz5N1arqj6gPj5T\n",

"vXOylWMa6p2TrT4+U1X1Afk31CS7RABIeQkNLjNnzlT//v21d+9eXX/99Ro4cOBpH7Nw4UK9//77\n",

"Kiws1PTp0+X3+5WVlZXIMoGEaw6FtXrHAXkNjwxP2187w5Mp0/Bo1c46xrwAwGkktKtoyZIlp/2a\n",

"devWtfm8X79+euONNxJUEZAcQctWUyisbKP9vxVMI1NNLWEFLZsVT3HGmkNhlvpH2mPJf6AT+ExD\n",

"3bI8arRs5bQzjMWyI/J5DflMfiUROwZ9oythyX+gE3izPJpY3E/Ndlh2ONLmnB2OyLLDmjQkj7+S\n",

"EbMTg76XVdSq0bJlZGa0Dvqe/cJWHQxayS4RiCuCC9BJppUVaGDf7moIWjrc2KJGy9bhxhY1BC0V\n",

"9u2u8rKTV5gGTodB3+hqCC5AJ8n1mXp66giVj86Xz2vIjjjyeQ2Vj87XYqZC4www6BtdER3qQCfK\n",

"9ZmaO6FIs8ZdwiBKnDUGfaMrosUFSAJvlke5PpObCc7KiUHfLXak3fOWHVG3bI+yMjPYYgJpgxYX\n",

"AHCpE4O+l1XUyg5H2nQX2eGImkJh9e/t1W1LNjLbCGmDFhcAcLGOBn0fCFiywxF9diDIbCOkFYIL\n",

"ALhYR4O+C/vmyMjMUL8eXmYbIa3QVQQALvfPg76zMjN025KNOifbOOVso1njLmGcFVyHFhcASBMn\n",

"Bn2HIk7Us40AtyG4AECaiXa2EVtMwI0ILgCQZthiAumMuA0AaWhaWYEqdh9RVX1ApuGRaWTKso+H\n",

"FraYgJvR4gIAaYgtJpCuaHEBgDTFFhNIRwQXAEhz3iwPgQVpg64iAADgGgQXAADgGgQXAADgGgQX\n",

"AADgGgQXAADgGgQXAADgGgQXAADgGgQXAADgGgQXAADgGgQXIA00h8I6GLTUHAonuxQASCiW/Adc\n",

"rCFgyb+xWqt3HFBTKKxuWR5NKs5TeVk+m+gBSEu0uAAu1RCw9MDyrVpWUatGy5aRmaFGy5a/okaz\n",

"X9iqg0Er2SUCQNwRXACX8m+sVlV9QH18pnrnZCvHNNQ7J1t9fKaq6gPyb6hJdokAEHcEF8CFmkNh\n",

"rd5xQF7DI8PT9tfY8GTKNDxatbOOMS8A4ioVxtMxxgVwoaBlqykUVrbR/t8eppGpppawgpYtb5an\n",

"k6sDkG5SaTwdLS6AC/lMQ92yPGqxI+2et+yIumV75DP52wTA2Um18XQEF8CFvFkeTSzup2Y7LDvc\n",

"NrzY4YgsO6xJQ/JobQFw1lJtPB3BBXCpaWUFGti3uxqClg43tqjRsnW4sUUNQUuFfburvCw/2SW6\n",

"Tir03wOpJBXH09GODLhUrs/U01NHyL+hRqt21qmpJSyf19CUIf1ZxyVGqdR/D6SSVBxPR3ABXCzX\n",

"Z2ruhCLNGneJgpYtn2nQPRSjE/33VfUBeQ2Pso3M1v77jbsP6+mpIwgv6LJOjKdrtGzltPNrYNkR\n",

"+bxGp46nO6OuopaWlnjXAeAseLM8yvWZhJYzkGr990AqScXxdFEHl3Xr1um73/2u+vTpI6/Xq+zs\n",

"bF122WVasGCBDh8+nMgaASAhUrH/Hkg1qTaeLqrgcsMNN+ipp57SLbfcog8++ECWZenQoUN65pln\n",

"ZNu2xo8fr9WrVye6VgCIq1j674Gu6sR4uvLR+fJ5DdkRRz6vofLR+VqchK7UDMdxnNN90Ycffqih\n",

"Q4d2eD4UCmn37t0qKiqKa3FnYt68eVq0aFGyywDgAs2hsG5++n/VaNnqnZN90vnDjS3yeQ391/1X\n",

"0Q0H6PjvTLLH00XV4tJeaHEcR4FAQJKUlZWVEqEFAGKRiv33QCpLhfF0MQ3Ovfvuu3X06FG1tLSo\n",

"pKRE/fr1029+85tE1QYACZdq/fcATi2m4PK3v/1NvXr10urVqzVixAjV1dXpmWeeSVRtAJBwqdZ/\n",

"D+DUYpp4fWI4zLvvvqtvfetb6tGjhzwemlABuBvr4QDuEVOLS15enu6991699NJLuvbaaxUKhRQO\n",

"M00QQHpIhf57AKcWU3BZtmyZBg0apBdffFG9evXSvn37NG/evETVBgAA0EZU06HdhOnQAACkr6jG\n",

"uFx88cXKyMjo8Pznn38et4KAjqTC+gGpjNcHQFcQVXD5y1/+Ikl68cUXVV1drZkzZ0qSfv/73ys/\n",

"n6mCSCx27j01Xh8AXUlMXUWjRo3S5s2bWz93HEdXXHFFm2PJRldRemlv594WO6JmO6yBfbt3+Z17\n",

"eX0AdDUxDc49duyYGhsbWz9vbGzUsWPH4l4UcAI7954arw+AriamdVymTp2q0tJS3XbbbZKkl156\n",

"SeXl5QkpDIh2595Z4y7pkmM6eH0AdEUxBZdHHnlEo0aN0po1ayRJCxcu1KRJkxJSGBDLzr1d8cbM\n",

"6wOgK4opuEjSjTfeqBtvvDERtQBt+ExD3bI8arRs5bQzTMOyI/J5DfnMmH+M0wKvDzoTs9aQKmJ6\n",

"R6uurtbChQu1a9cu2bbdevxECwwQTyd27l1WUSs7HGnTHXJi594pQ/p32TfRVH19uMGlF2atIdXE\n",

"FFxuu+02XXPNNZo9ezZ7FKFTTCsrUMXuI6qqD8g0PDKNTFn28ZsyO/em1uvDDS79tDdrrdGy5a+o\n",

"0cbdh2OetUaoRTzENB162LBh2r59eyLrOWtMh04/B4OW/BtqtGpnnZpawuqW7dGkIel1QzybN/RU\n",

"eH2Ylp2ennjzEy2rqFUfn3lSi15D0FL56HzNnVB02uch1CKeYmpxKS4uVm1trQYMGJCoeoCTpPPO\n",

"vfF4Q0+F1+er07JP3OByzOM3uBPTsqO5wSF1xGvWWrxbbYCYgktDQ4OGDx+usrIyeb3e1uOvvPJK\n",

"3AsD/pk3y5M2gUWK/xt6sl4fpmWnp3jNWiPUIt5iCi7l5eWs2wLESbq8oTMtOz3FY9YaoRaJEFNw\n",

"ufPOOxNVB9ClpNMbOtOy01M8Zq0RapEIMb2T/Mu//Eu7x//4xz/GpRigq0inN/RUnZaNs3e2s9YI\n",

"tUiEmPYquvzyy1s/hgwZor///e8655xzElUbkLZOvKG32JF2z1t2RN2yPa55Q59WVqCBfburIWjp\n",

"cGOLGi1bhxtb1BC0mLbuYrk+U09PHaHy0fnyeQ3ZEUc+r6Hy0flaHMUYrBOhttkOyw63/Vk/EWon\n",

"Dckj1CImMb0r3n///W0+v/fee3XTTTd1+PVz5szRa6+9ppqaGm3dulUlJSWSpOuuu051dXXKzMxU\n",

"9+7d9dRTT2nEiBGSpM8++0x33nmnDh48qJ49e+rZZ5/VkCFDYrwsILWlWyvFiRvcV6dl+7yG/t+l\n",

"F+imERe6JoDhZGc7ay2V1hpCeohpHZd/FolENHjwYP39739v9/z69ev1ta99TVdffbVeffXV1uBy\n",

"9OhR9erVS5L05z//WY888oi2bdsmSRo/frzuuOMOTZ8+XX/605+0cOFCbd68OeqaWMcFbnEwaGn2\n",

"C1s7fEOP5i/aVNQcCqvmUKNeq/xCb31cz7odSIm1hpA+YvozaN68ea3/Hw6HtWXLFhUXF3f49WPG\n",

"jGn3+InQIknHjh1TRkaGJKm+vl5btmzRG2+8IUm69dZbNXv2bFVVVWngwIEnPY9lWbIsq82xcDgc\n",

"9fUAydRRK8WUIf1d/YYeaLY1/7WPWLcDrVJhrSGkj5iCS8+ePf/vgYahOXPm6JZbbjmjf/iOO+7Q\n",

"2rVrJUl//etfJUl79uzR+eefL8M4XlZGRoYGDBig2tradoPLY489pp/+9KdtjpWWlp5RPUAypOMb\n",

"erpM80b8pdtaTEiOmILL/Pnz4/YPP//885Kk5557Tj/84Q9bw0ssHnrooTatQJL08MMPx6U+oDOl\n",

"yxt6Ok3zBpCaYppVFAgEdP/996uoqEhFRUWaPXu2AoHAWRVw5513au3atTp06JAuuugi7d+/v3Xn\n",

"acdxTrnFgGma6tGjR5sPNn8EkieWad4AcCZiCi733XefbNvWypUr9dJLLykSiei+++6L6R88evSo\n",

"vvjii9bPX331VZ133nk699xz1bdvX1122WXy+/2SpJdffln9+/dvt5sIQOpJt2neAFJPTO8e27dv\n",

"b539I0m/+c1vNHz48A6/fubMmXr99ddVV1en66+/Xt27d9fbb7+tKVOmqKmpSZmZmerTp4/+8pe/\n",

"tA7QXbJkiaZPn64FCxaoR48eWrp06RleGoDOlm7TvAGknpiCSzgcViAQUPfu3SVJwWDwlLN4lixZ\n",

"0u7xTZs2dfiYQYMGacOGDbGUBSCFsG4HgESKea+i0tJS3X777ZKklStX6q677kpIYQDcKV2neQNI\n",

"DTEvQLd69Wq99dZbkqRrr71WEydOTEhhZ4oF6IDU0RwKp800bwCpIaoWl2PHjunnP/+5PvnkE11+\n",

"+eX6xS9+IdPkryYAp5Yu07wBpI6oZhXNmjVLn3/+uSZNmqT3339f//Ef/5HougAAAE4SVYvL9u3b\n",

"tWPHDmVkZGj69Om6+uqrE10XgASh+waAm0UVXEzTbJ2u3K1bt4QWBCAxGgKW/BurtXrHATY+BOBa\n",

"UQWXvXv3tllaf8+ePW0+ZzAskNoaApYeWL6VjQ8BuF5UweX+++8/5ecAUhsbHwJIF1EFl3hurgig\n",

"c7HxIYB0EtWsooqKilOeb2pq0kcffRSXggDEFxsfAkgnUQWXX//615owYYKWLl2qjz76SIcOHdK+\n",

"ffu0Zs0a/fu//7vKysp04MCBRNcK4Ayw8SGAdBLVO9XKlSu1efNmLVmyRL/4xS+0d+9e5eTkaNiw\n",

"Ybr11lv1v//7v8rJyUl0rQDOABsfAkgnUf+JNWrUKI0aNSqRtQBIEDY+BJAuouoqOuG+++6L6hiA\n",

"1HJi48Py0fnyeQ3ZEUc+r6Hy0flazFRoAC4SU6f2xo0bTzr2/vvvx60YAImT6zM1d0KRZo27hJVz\n",

"AbhWVMFlxYoVevHFF7V7927dcsstrcePHTsmn8+XsOIAAAC+Kqrgcumll+rmm2/WBx98oJtvvrn1\n",

"eI8ePXTNNdckrDgA8cOS/wDSQVTBZfjw4Ro+fLhuvPFG9enTJ9E1AYgzlvwHkC5iGuOSlZWlhQsX\n",

"ateuXbLt/1us6o9//GPcCwMQPyz5DyBdxBRcJk+erD59+qisrEweD4P6ADdgyX8A6SSm4LJ//369\n",

"9dZbiaoFQALEsuQ/wQVAqotpHZdLLrlER48eTVApABKBJf8BpJOo3qnmzZsnSTrnnHN02WWXaeLE\n",

"ifJ6va3nFy1alJjqAJw1lvwHkE6iCi49e/Zs/e/Xv/71hBaEztMcCrMQWRfBkv8A0kVUwWX+/PmJ\n",

"rgOdiPU8up4TS/77N9Ro1c46NbWE5fMamjKkP993AK4SU6f2o48+etKxXr16qaysjA0YXYL1PLou\n",

"lvwHkA5iGpz78ccf67e//a327NmjvXv36plnntG6dev0/e9/X0899VSiakQcfXU9j9452coxDfXO\n",

"yVYfn9m6nkc6aQ6FdTBoqTkUTnYpKcOb5VGuzyS0AHClmFpcjhw5osrKSvXr10+SdODAAU2bNk0b\n",

"N27UN77xDc2ZMychRSI+utJ6HnSHAUB6iqnFZe/eva2hRZL69eunL774Queee66ysrLiXhziK5b1\n",

"PNzsRHfYsopaNVq2jMyM1u6w2S9s1cGglewSAQBnKKbgcuGFF+qnP/2p9uzZoz179ujRRx/VBRdc\n",

"oHA4rIyMjETViDjpKut5dLXuMADoSmIKLs8995x27typkpISlZSUaMeOHXr22WcVCoX0/PPPJ6pG\n",

"xMmJ9Tya7bDscNvwcmI9j0lD8lzdTRRtdxhjXgDAnWL60zovL08rV65s99zQoUPjUhASK93X82B5\n",

"ewBIb1EFl3feeUdjx47Va6+91u75m266Ka5FIXHSfT2PE91hjZatnHYuxbIj8nkN13eHAUBXFdW7\n",

"t9/v19ixY/XEE0+cdC4jI4Pg4jLpvJ4Hy9sDQHqLKrj8/ve/lyStXbs2ocWgc3mzPGl5A0/37jAA\n",

"6MpiGpxr27Z+/etf67777pMk7dq1S2vWrElIYcCZOtEdVj46Xz6vITviyOc1VD46X4tZGRgAXC2m\n",

"jv7Zs2crHA7rvffekySdd955uv3227Vly5aEFAecqXTuDgOAriym4LJx40ZVVlZqxIgRko7vUxQK\n",

"hRJSGBAP6dodBgBdVUxdRV6vt83n4XBYkUj7i5kBAADEW0zBZdiwYfL7/YpEIqqqqtKsWbM0bty4\n",

"BJUGAADQVlTBZf78+Vq/fr2eeOIJvfvuu6qrq9NVV12ljIwM/fKXv0x0jQAAAJKiHONSX1+vGTNm\n",

"aM+ePSorK9OcOXM0fvx4XXHFFfJ4GD8AAAA6R1QtLr/97W/197//XVVVVbr77rtVW1ur6dOnq3fv\n",

"3rrxxhsTXSOSqDkU1sGgxd4+AICUENOsovPPP1+33nqrzj//fOXl5Wn58uWqrKxMUGlIpoaAJf/G\n",

"aq3ecUBNobC6ZXk0qTgvLbYFAAC4V1TBZf369Vq3bp3Wrl2rffv2qbS0VGPGjNHrr7+uwsLCRNeI\n",

"TtYQsPTA8q2qqg/Ia3iUbWSq0bLlr6jRxt2H9TSLuAEAkiSq4DJu3DiVlpbqJz/5iSZOnJjompBk\n",

"/o3VqqoPqI/PbN3rJ8c8vtdPVX1A/g01mjuhKMlVAgC6oqjGuKxfv1433HCDHn/8cQ0cOFBTp07V\n",

"7373O3366aeJrg+drDkU1uodB+Q1PG02KJQkw5Mp0/Bo1c46xrwAAJIiqhaXq6++WldffbV+/OMf\n",

"q6WlRRUVFVq7dq1uuukmBYNB7d27N9F1opMELVtNobCyjfYzrWlkqqklrKBlsyItAKDTxTQ494sv\n",

"vtDatWu1bt06rVmzRvX19br66qsTVRuSwGca6pblUaNlK6edYSyWHZHPa8hnxvSjAwBAXETVVfSD\n",

"H/xARUVFKioq0rPPPquLL75Yfr9fR44c0apVqxJdIzqRN8ujicX91GyHZYfbbudghyOy7LAmDcmj\n",

"tQUAkBRR/dl80UUX6Q9/+INKS0uVlZWV6JqQZNPKClSx+4iq6gMyDY9MI1OWfTy0FPbtrvKy/GSX\n",

"CADooqIKLj/5yU8SXQdSSK7P1NNTR8i/oUardtapqSUsn9fQlCH9WccFAJBUDFRAu3J9puZOKNKs\n",

"cZcoaNnymQbdQwCApCO44JS8WR4CCwAgZUQ1OBcAACAVEFwAAGeETViRDHQVAQBiwiasSCZaXAAA\n",

"UTuxCeuyilo1WraMzIzWTVhnv7BVB4NWsktEmiO4AACi9tVNWHvnZCvHNNQ7J1t9fGbrJqxAIhFc\n",

"AABRYRNWpAKCCwAgKrFswgokCsEFABCVE5uwttiRds9bdkTdsj1swoqEIrgAAKLCJqxIBQkNLnPm\n",

"zFFBQYEyMjJUWVkpSWpubtZ3vvMdFRUVafjw4ZowYYKqqqpaH1NfX6+JEyeqsLBQxcXFWr9+fSJL\n",

"BADEYFpZgQb27a6GoKXDjS1qtGwdbmxRQ9BiE1Z0ioQGl8mTJ+u9995Tfn7bH+QZM2bok08+0bZt\n",

"23TzzTfrnnvuaT33ox/9SKWlpfrss8+0dOlSTZ06VaFQKJFlAgCidGIT1vLR+fJ5DdkRRz6vofLR\n",

"+Vo8dQTruCDhEtoROWbMmJOOeb1e3XDDDa2fl5aW6vHHH2/9fOXKla0tMKNGjdIFF1ygd955R9de\n",

"e+1Jz2VZliyr7ZoB4TCj2QEgkdiEFcmU9DEuTz75pG6++WZJ0qFDhxQKhZSXl9d6vqCgQLW1te0+\n",

"9rHHHlPPnj3bfGzatKlT6gaAVNYZy/F7szzK9ZmEFnSqpA79XrBggaqqqvT222+f0eMfeughzZs3\n",

"r82xhx9+OB6lAYArsRw/0l3Sgsvjjz+uV155RW+99ZbOOeccSdJ5550nwzBUV1fX2upSXV2tAQMG\n",

"tPscpmnKNNv+Ino8JH8AXdOJ5fir6gPyGh5lG5mty/Fv3H1YTzMGBWkgKV1FixYt0vLly/Xmm2+q\n",

"V69ebc5NmTJFzzzzjCRp8+bN2rdvn8aOHZuEKgHAXViOH11BQoPLzJkz1b9/f+3du1fXX3+9Bg4c\n",

"qL179+rBBx/U0aNH9c1vflMlJSUaPXp062MWLlyo999/X4WFhZo+fbr8fr+ysrISWSYAuB7L8aOr\n",

"SGhX0ZIlS9o97jhOh4/p16+f3njjjUSVBABpKZbl+BlMCzdL+qwiAMDZYzl+dBUEFwBIAyzHj66C\n",

"6A0AaWJaWYEqdh9RVX1ApuGRaWTKso+HFpbjR7qgxQUA0kRHy/F/d9RF+unNQ+gmQlrgpxgA0shX\n",

"l+OvOfQPvVa5V29+VK/Xtu1nMTqkBVpcACANBZptzX9tp1Zs2atGy5aRmdG6GN3sF7bqYNA6/ZMA\n",

"KYjgAgBpiMXokK4ILgCQZliMDumM4AIAaSaWxegAtyG4AECaYTE6pDOCCwCkGRajQzojbgNAGmIx\n",

"OqQrWlwAIA11tBhd+eh8LZ46gnVc4Fq0uABAmvrqYnRBy5bPNOgegusRXAAgzXmzPAQWpA26igAA\n",

"gGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQ\n",

"XAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAA\n",

"gGsQXAAAgGsQXAAAgGsQXAAAgGsQXM5Acyisg0FLzaFwsksBAKBLMZJdgJs0BCz5N1Zr9Y4DagqF\n",

"1S3Lo0nFeSovy1euz0x2eQAApD1aXKLUELD0wPKtWlZRq0bLlpGZoUbLlr+iRrNf2KqDQSvZJQIA\n",

"kPYILlHyb6xWVX1AfXymeudkK8c01DsnW318pqrqA/JvqEl2iQAApD2CSxSaQ2Gt3nFAXsMjw9P2\n",

"JTM8mTINj1btrGPMCwAACUZwiULQstUUCivbaP/lMo1MNbWEFbTsTq4MAICuheASBZ9pqFuWRy12\n",

"pN3zlh1Rt2yPfCZjnQEASCSCSxS8WR5NLO6nZjssO9w2vNjhiCw7rElD8uTN8iSpQgAAugaaCKI0\n",

"raxAFbuPqKo+INPwyDQyZdnHQ0th3+4qL8tPdokAAKQ9WlyilOsz9fTUESofnS+f15AdceTzGiof\n",

"na/FU0ewjgsAAJ2AFpcY5PpMzZ1QpFnjLlHQsuUzDbqHAADoRASXM+DN8hBYAABIArqKAACAaxBc\n",

"AACAaxBcAACAaxBcAACAaxBcAACAaxBcAACAaxBcAACAaxBcAACAaxBcAACAaxBcotQcCutg0FJz\n",

"KJzsUgAA6LJY8v80GgKW/BurtXrHATWFwuqW5dGk4jyVl+WzsSIAAJ2MFpdTaAhYemD5Vi2rqFWj\n",

"ZcvIzFCjZctfUaPZL2zVwaCV7BIBAOhSCC6n4N9Yrar6gPr4TPXOyVaOaah3Trb6+ExV1Qfk31CT\n",

"7BIBAOhSEhpc5syZo4KCAmVkZKiysvK0xyXps88+05VXXqmioiKNGjVKO3fuTGSJHWoOhbV6xwF5\n",

"DY8MT9uXyfBkyjQ8WrWzjjEvAAB0ooQGl8mTJ+u9995Tfn5+VMclaebMmZoxY4Y+/fRT/fCHP9T0\n",

"6dMTWWKHgpatplBY2Ub7L5FpZKqpJaygZXdyZQAAdF0JDS5jxoxR//79oz5eX1+vLVu2qLy8XJJ0\n",

"6623as+ePaqqqkpkme3ymYa6ZXnUYkfaPW/ZEXXL9shnMr4ZAIDOklJjXPbs2aPzzz9fhnE8DGRk\n",

"ZGjAgAGqra1t9+sty9KXX37Z5iMcjk/XjTfLo4nF/dRsh2WH24YXOxyRZYc1aUievFmeuPx7AADg\n",

"9FIquMTqscceU8+ePdt8bNq0KW7PP62sQAP7dldD0NLhxhY1WrYON7aoIWipsG93lZed3NUFAAAS\n",

"J6WCy0UXXaT9+/fLto+PG3EcR7W1tRowYEC7X//QQw/p2LFjbT6uuOKKuNWT6zP19NQRKh+dL5/X\n",

"kB1x5PMaKh+dr8VTR7COCwAAnSylBmj07dtXl112mfx+v6ZPn66XX35Z/fv318CBA9v9etM0ZZpt\n",

"w4PHE9+um1yfqbkTijRr3CUKWrZ8pkH3EAAASZLQFpeZM2eqf//+2rt3r66//vrWANLRcUlasmSJ\n",

"lixZoqKiIv3yl7/U0qVLE1li1LxZHuX6TEILAABJlOE4jpPsIuJp3rx5WrRoUbLLAAAACZBSY1wA\n",

"AABOheACAABcg+ACAABcg+ACAABcg+ACAABcg+ACAABcg+ACAABcg+ACAABcg+ACAABcg+ACAABc\n",

"g+ACAABcg+ACAABcg+ACAABcg+ACAABcg+ACAABcg+ACAABcg+ACAABcg+ACAABcg+ACAABcg+AC\n",

"AABcg+ACAABcg+ACAABcg+ACAABcg+ACAABcg+DiQs2hsA4GLTWHwskuBQCATmUkuwBEryFgyb+x\n",

"Wqt3HFBTKKxuWR5NKs5TeVm+cn1msssDACDhaHFxiYaApQeWb9Wyilo1WraMzAw1Wrb8FTWa/cJW\n",

"HQxayS4RAICEI7i4hH9jtarqA+rjM9U7J1s5pqHeOdnq4zNVVR+Qf0NNsksEACDhCC4u0BwKa/WO\n",

"A/IaHhmett8yw5Mp0/Bo1c46xrwAANIewcUFgpatplBY2Ub73y7TyFRTS1hBy+7kygAA6FwEFxfw\n",

"mYa6ZXnUYkfaPW/ZEXXL9shnMtYaAJDeCC4u4M3yaGJxPzXbYdnhtuHFDkdk2WFNGpInb5YnSRUC\n",

"ANA5+BPdJaaVFahi9xFV1QdkGh6ZRqYs+3hoKezbXeVl+ckuEQCAhKPFxSVyfaaenjpC5aPz5fMa\n",

"siOOfF5D5aPztXjqCNZxAQB0CbS4uEiuz9TcCUWaNe4SBS1bPtOgewgA0KUQXFzIm+UhsAAAuiS6\n",

"igAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAAgGsQXAAA\n",

"gGtkOI7jJLuIeLrllltUUFCQ7DLiKhwOa9OmTbriiivk8aTvUv9d5TqlrnOtXeU6pa5zrV3lOqWu\n",

"c62pcp35+fn613/919N+XdoFl3T05ZdfqmfPnjp27Jh69OiR7HISpqtcp9R1rrWrXKfUda61q1yn\n",

"1HWu1W3XSVcRAABwDYILAABwDYILAABwDYKLC5imqfnz58s0zWSXklBd5TqlrnOtXeU6pa5zrV3l\n",

"OqWuc61uu04G5wIAANegxQUAALgGwQUAALgGwQUAALgGwSXFWJal2bNnq7CwUEOHDlV5ebkkqaCg\n",

"QIMGDVJJSYlKSkq0YsWKJFd69jq61o6Ou1V713Po0KHW72VJSYmKiopkGIYOHz6c7HLPSkffu7/+\n",

"9a+67LLLVFJSouLiYj333HNJrvTsdXStq1ev1siRIzVs2DCVlpZq27ZtSa70zJ3q57S+vl4TJ05U\n",

"YWGhiouLtX79+mSXe1ZOda0LFizQoEGDlJmZqVdffTXZpZ6VU13nXXfdpaKiIg0fPlxXXXWVNm/e\n",

"nOxy2+cgpcydO9eZPXu2E4lEHMdxnP379zuO4zj5+fnO1q1bk1hZ/HV0rR0dd6torudXv/qV861v\n",

"fauzS4u79q41Eok4vXv3drZt2+Y4juPs3r3bMU3T+fLLL5NZ6llr71oPHz7snHvuuc6OHTscx3Gc\n",

"9evXO0OGDElmmXH11Z/Tu+66y5k/f77jOI6zadMm58ILL3RaWlqSWF18ffVaKyoqnF27djljx451\n",

"/vznPye3sDj76nX+13/9lxMKhRzHcZz//u//dvLz85NYWccILikkGAw63bt3d44dO3bSuXQLLh1d\n",

"66leAzeK9nouvfRS178hdnStkUjEOffcc5133nnHcRzH2bZtm3PBBRc4lmUlo8y46OhaN2/e7BQW\n",

"FrY51r17d+dvf/tbZ5aXMF/9Oc3JyWkTwkeNGuW8+eabSaos/tr7nUzH4NLRe09DQ4NjGEZrkEkl\n",

"dBWlkF27duncc8/VggULNHLkSH3jG9/Q22+/3Xr+jjvu0NChQ3X33XeroaEhiZWevY6u9XSvgdtE\n",

"cz3vv/++jhw5om9961tJqjI+OrrWjIwMrVixQrfccovy8/N19dVX67nnnlN2dnaySz5jHV1rYWGh\n",

"Dh06pPfff1+S9NprrykQCKi6ujq5BcfBV39ODx06pFAopLy8vNbzBQUFqq2tTWKF8ZMuv5Onc6rr\n",

"fPLJJ3XDDTfIMIwkVHZqBJcUYtu2ampqNHjwYG3ZskVPPfWUbr/9dh04cEDr16/X9u3b9cEHHyg3\n",

"N1d33nlnsss9Kx1da1NTU4evgRud6nt6wh/+8AfdcccdKfkGEYtTXevPf/5zvfLKK6qpqdHbb7+t\n",

"adOm6eDBg8ku+Yx1dK3Nzc3605/+pIceekiXX3653njjDQ0ePNj131spfX5Oo9FVrrWj6/T7/Vq5\n",

"cqV+97vfJamy00h2kw/+T0NDg5OZmenYtt16bOTIkSc1v37xxReOz+fr7PLiqqNrfemll6J6Ddzi\n",

"dN/TQCDg+Hw+5+OPP05WiXHT0bX+6le/Oqn7ZOTIkc4bb7zR2SXGTbS/q83NzU6vXr2czz77rLNL\n",

"jKv2fk7POeectOwqOtXvZDp1FXV0nS+++KIzcOBAp6amJkmVnR4tLikkNzdX11xzjf7nf/5HkrR7\n",

"927t3r1bX//613X06NHWr1u+fLlGjBiRpCrjo6NrLSsr6/A1cKNTfU8lacWKFRo+fLguvfTSZJYZ\n",

"Fx1d65QpU7R//359/PHHkqSqqirt2rVLgwYNSma5Z+VU39f9+/e3ft3PfvYzjR8/XgMHDkxWqXHR\n",

"3s/plClT9Mwzz0iSNm/erH379mns2LHJKjFu0ul38lTau86VK1fqxz/+sd566y0NGDAgidWdRrKT\n",

"E9ratWuXM27cOKe4uNgZNmyY86c//cnZtWuXU1JS4gwdOtQpLi52brrpJmf37t3JLvWstXetpzru\n",

"Vqe6nrKyMuePf/xjEquLr46u9YUXXmg9Vlxc7CxbtizJlZ69jq71nnvucQYNGuRccsklTnl5uXPk\n",

"yJHkFhoH7f2c1tXVORMmTHAGDhzoDB482FmzZk2Sqouv9q71Zz/7mXPhhRc62dnZznnnnedceOGF\n",

"Tn19fZIqjI/2rtMwDKd///7O8OHDWz8OHjyYpAo7xl5FAADANegqAgAArkFwAQAArkFwAQAArkFw\n",

"AdCqoKBAlZWVbY6NGzfutPuz3HPPPVq7du1pn/+RRx7R3Llz2z1XWVmpF1988aTjU6ZM0YYNG077\n",

"+GhUV1erV69eZ/z4f7Z9+3ZNmjQpbs8H4PQILgDO2n/+53/qm9/85lk9R3vBZdOmTTp8+LDKysrO\n",

"6rkTZdiwYTJNU2vWrEl2KUCXQXABEJVAIKAf/OAHuuKKKzRs2DDNmDFDLS0tktq2yuzfv1/XXXed\n",

"Bg8erOuuu07f/e539cgjj7Q+z/79+/Xtb39bgwcP1vjx41t3Gv7JT36itWvXqqSkRLNmzZIkLVmy\n",

"RFOnTm23nmeffVbXXnutvve972no0KEaOXKkPv/889bzS5cuVUlJiYYPH66RI0e2WXZ//vz5uvzy\n",

"yzVw4ED99a9/bT2+efNmjR8/XiNHjtSIESP00ksvSZIaGhp03XXXaejQoRo2bJjuuuuu1sd873vf\n",

"05IlS87qtQUQPYILgDZuv/32Ntveb9myRZL04IMP6hvf+IY2bdqkbdu2KRKJ6Mknnzzp8XPmzFFZ\n",

"WZk++ugjPf/881q3bl2b8xUVFXr22Wf10UcfqW/fvlqyZIn69u2rRx99VN/85jdVWVnZurDZunXr\n",

"NHr06A5r3bx5sxYsWKAPP/xQ1157rRYuXNj6uEcffVSrVq3Stm3btH79evXt21eSdOzYMQ0bNkx/\n",

"+9vf9PTTT+vf/u3fJElHjx7VjBkztGzZMm3ZskVvvvmmHnzwQe3bt09+v18XX3yxPvzwQ23fvl2/\n",

"/vWvW2soKytz9X5agNuk90YMAGK2YsUKlZSUtH4+btw4SdKrr76qDRs2aNGiRZKkpqYmeTyekx7/\n",

"9ttv6/HHH5ck5eXlnbSB28SJE3XeeedJOn7T//DDDzusZe/everXr1+H58vKynTxxRe3/v/ixYsl\n",

"Sa+//rqmTZum888/X5J0zjnntD7G6/XqlltuaX3Mrl27JB3fcO7zzz8/aczKJ598otLSUj3xxBN6\n",

"8MEHNWbMGE2cOLH1fF5eng4dOqTm5mZ5vd4OawUQHwQXAFFxHEcvv/yyioqKYnpcRkZGm8+/enP3\n",

"eDyybbvDx55zzjlqbm7u8Hwsz3WCaZqtNXk8HoXDYUnHr2/IkCGtOzv/s8rKSr311lt65ZVX9PDD\n",

"D2vr1q3yeDxqbm6Wx+Nx9W7XgJvQVQQgKt/5zne0cOHC1nBw5MgRVVVVnfR148eP17PPPitJOnDg\n",

"gP7yl79E9fw9evTQsWPH2hwbNmyYPvnkk5hr/fa3vy2/39+6b9A//vEP/eMf/zjlY6688krt3r1b\n",

"b731VuuxyspKtbS0aPfu3fL5fLrtttu0ePFiffrppwoGg5Kkjz/+WMXFxcrM5O0U6Az8pgGIyhNP\n",

"PKFu3bqppKREw4YN0zXXXNNmwOsJTz75pN59910NHjxY3//+9zV69OiopiBfc801sixLw4YNax2c\n",

"O3ny5NaNDGMxZswYzZ8/X9dff72GDx+usWPHqqGh4ZSP6d27t15//XUtWLBAw4cP1+DBg/WjH/1I\n",

"kUhE69at0+WXX66SkhJdeeWV+tWvfqWePXtKklavXq3JkyfHXCOAM8NeRQDiqqmpSVlZWTIMQ4cO\n",

"HVJpaan8fv8pB9l2JBgM6sorr9SGDRuUk5OTgGrPTktLi0aOHKk1a9YoNzc32eUAXQLBBUBcbd++\n",

"XXfccYccx1FLS4tmzJjROnPnTLz99tvq16+fiouL41hlfHzyySfatWuXbrjhhmSXAnQZBBcAAOAa\n",

"jHEBAACuQXABAACuQXABAACuQXABAACuQXABAACuQXABAACuQXABAACuQXABAACu8f8B1eS/fELP\n",

"cJ8AAAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-378ddb96-d5d5-464f-9f79-d5535a1e85f7\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-378ddb96-d5d5-464f-9f79-d5535a1e85f7\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<google.colab.\_quickchart\_helpers.SectionTitle at 0x786710dd8ca0>"

],

"text/html": [

"<h4 class=\"colab-quickchart-section-title\">Values</h4>\n",

"<style>\n",

" .colab-quickchart-section-title {\n",

" clear: both;\n",

" }\n",

"</style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_35['Index'].plot(kind='line', figsize=(8, 4), title='Index')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-fe4b6887-23ca-4a6f-be46-fefc5a79d609\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAApe0lEQVR4nO3de1xUdf7H8fdwEcNAEvMW4qiIZRJ4I/KSWlqKtmnltu2Wkpp2\n",

"+5Xr7hZW1loGtrm0lrs/29rcXf1lWmhtS1pmeatMyltZKoiEN8Qw74pczu8Pk13ygFxmzsyZeT0f\n",

"Dx6POJ8Z/YzfqFfTwDgMwzAEAAAA2EyApxcAAAAA6oOQBQAAgC0RsgAAALAlQhYAAAC2RMgCAADA\n",

"lghZAAAA2BIhCwAAAFsiZAEAAGBLhCwAAABsiZAFAJu48847lZKS4uk1AMBrELIAYJEBAwboiSee\n",

"8PQaAOAzCFkAAADYEiELAB7gdDr19NNPKzk5WWFhYerYsaOWLFlS5TbPP/+8oqOjFRERofHjx+vM\n",

"mTNV5ocPH9Z9992ndu3aKTIyUsnJycrLy5MkffvttwoPD9c777xTefv77rtPPXv2VElJifsfIABY\n",

"gJAFAA959dVXNX36dB05ckQPPPCAxowZo6NHj0qSXn/9daWlpemNN97QwYMHlZiYWCV0DcPQyJEj\n",

"dfToUW3cuFH79u1TXFychg8frtLSUl1xxRX629/+pjFjxig3N1fz5s3TokWL9NZbbykkJMRTDxkA\n",

"XIqQBQAPGT9+vLp3766AgABNnDhRx44d07fffitJmjt3rsaOHavevXsrODhYEyZM0FVXXVV5340b\n",

"N+qTTz7Ryy+/rGbNmikkJERpaWnatWuXPv/8c0nSqFGjNG7cOA0fPlz333+/5s+fL6fT6YmHCgBu\n",

"QcgCgIe0adOm8q+bNGkiSTp27Jgkac+ePWrfvn2V2//35zk5OSorK1NUVJQiIiIUERGhyMhISdLu\n",

"3bsrb/fwww8rNzdXcXFxGjp0qNseCwB4AiELAF4oKipK+fn5Va799+etWrVSo0aNdPDgQR0+fLjy\n",

"49SpU7rjjjskSaWlpbrjjjt06623Kj8/X7Nnz7bwEQCA+xGyAOCFxowZo9dee03r1q1TWVmZXn31\n",

"VW3evLly3rdvX3Xt2lX33XefioqKJEk//PCDMjMzdfLkSUnSb3/7W506dUr/+Mc/tHDhQj366KOV\n",

"LzsAAF9AyAKAF/rVr36lRx55RKNGjVLz5s21bt06jRw5snIeGBio5cuXKzQ0VFdffbXCwsIUHx+v\n",

"JUuWyOFw6I033tD8+fOVmZmpxo0bq1+/fnr66ad122236eDBgx58ZADgOg7DMAxPLwEAAADUFc/I\n",

"AgAAwJYIWQAAANgSIQsAAABbImQBAABgS4QsAAAAbImQBQAAgC0RsgAAALAlnw7ZWbNmeXoFAAAA\n",

"uIlPh+x3333n6RUAAADgJnUK2dOnT2vEiBGKjY1VfHy8Bg8erNzcXEnSgAED1L59eyUkJCghIUEv\n",

"vPBC5f2Kioo0ZMgQderUSV27dtXq1asbPAMAAIB/C6rrHSZMmKChQ4fK4XBo9uzZGj9+vFauXClJ\n",

"euGFFzRixIjz7pOamqqkpCQtW7ZM2dnZGjlypHbt2qXg4OB6zwAAAODf6vSMbOPGjZWcnCyHwyFJ\n",

"SkpKUn5+/gXvt2jRIt17772SpF69eqlNmzZatWpVg2YAAADwbw16jeysWbN08803V36empqquLg4\n",

"3X777crLy5MkFRcXq7S0VK1ataq8ndPpVEFBQb1nZkpKSnT06NEqH+Xl5Q15eAAAAPBi9Q7ZtLQ0\n",

"5ebmKj09XZI0b948bdu2TVu2bFG/fv00fPhwly1ZG+np6WratGmVj/Xr11u6AwAAAKxTr5CdOXOm\n",

"Fi9erKVLlyo0NFSS1LZtW0mSw+HQgw8+qLy8PBUXFysyMlJBQUEqLCysvH9+fr6io6PrPTMzZcoU\n",

"HTlypMpHYmJifR4eAAAAbKDOIZuRkaEFCxZo+fLlioiIkCSVlZXpwIEDlbfJzMxUy5YtFRkZKUka\n",

"NWqU5syZI0nKzs7W3r171b9//wbNfiokJETh4eFVPgIDA+v68AAAAGATdfqpBXv27NFvfvMbdejQ\n",

"QQMHDpR0NiA/+ugjDRs2TCUlJQoICFDz5s31r3/9q/J+zz33nO666y516tRJjRo10vz58yt/8kB9\n",

"ZwAAAPBvDsMwDE8v4S6TJ09WRkaGp9cAAACAG/j0O3sBAADAdxGyAAAAkCQZhqGy8gpPr1FrhCwA\n",

"AICfMwxDH2wt1E2z1+rvn+Z7ep1aq/Nb1AIAAMA3VFQY+uCbA3pxRY6+2X9UknT8dJnG9mmvgACH\n",

"h7e7MEIWAADAz5wN2EL96cMcbSs8Jklq0ihQKX2cGte3gy0iViJkAQAA/EZFhaFlWwv14or/BOzF\n",

"IUFK6e3UuL7tdUmTRh7esG4IWQAAAB9XUWHova/366UVudp+4GzAhoUE6e4+To3t214RofYK2HMI\n",

"WQAAAB9VXmHova/268UVOcopOi5JCmscpLF92mtsn/ZqGmrvN5oiZAEAAHxMeYWhf2/Zp5c+ylXu\n",

"jwEb3jhIY/u219192qvpRfYO2HMIWQAAAB9RXmHo3c379NJHOdp58ISkswE7vl8HpfRxKryxbwTs\n",

"OYQsAACAzZWVV+jdLfv00opc5X1/NmCbXhSs8X3ba4wPBuw5hCwAAIBNlZVX6J1N+zT741zt+jFg\n",

"I0KDdU+/Dhp9TTuF+WjAnkPIAgAA2ExZeYWWbNyrP3+cq/zik5KkS0KDdc+1HTT6GqcuDvGPxPOP\n",

"RwkAAOADSn8M2Nkf5arg0NmAbdakUeUzsE38JGDP8a9HCwAAYENnyiq0ZOMezf44V7sPnZIkRTZp\n",

"pAnXdtCdSf4XsOf456MGAACwgZNnynTHX9dp854jldeaX9xIE6/tqF8lRSu0kX+nnH8/egAAAC90\n",

"oqRMt//1M32992iV608Mu0K/urqdLmoU6KHNvAshCwAA4CWOl5Rp1JzP9O3+qgEbdclFevfBvrqk\n",

"iT3fStZdCFkAAAAPO3a6VLf+76faceB4levtIkP1zgN9FBFKwJohZAEAADzk6OlSjfzzJ5XvwnVO\n",

"h+ZNtOSBPj7zVrLuQsgCAABY7MjJUo34yyeVb2JwTqcWFyvz/t4++05crkbIAgAAWOTwyTO6afba\n",

"yh+hdU7nlmF6675rfP6duFyNkAUAAHCzH06c0fCX1mrv4aoB26V1uBbde43fvBOXq/GnBgAA4CaH\n",

"TpxR8qw1Kjx6usr1uMua6o0JSX77Rgauwp8eAACAi31/vERD/rRG3x8vqXI9vm2EFtxztd+/kYGr\n",

"8KcIAADgIgePlWjIn1ar+MSZKtd7tLtE88ddzRsZuBghCwAA0EBFx05rcMZqHTlVWuV6orOZ/jku\n",

"UY2DCVh3IGQBAADq6cDR07r+j6t0vKSsyvWkDs3097sJWHcjZAEAAOqo8MhpXffHlTp5przK9b4x\n",

"zfXqmJ4ErEUIWQAAgFrad/iUBsxcqTNlFVWuXxt7qV4Z3UMhQQSslQhZAACAC9jzw0n1f36lyiuM\n",

"KtcHdr5UL9/VU42CAjy0mX8jZAEAAKqx+9BJXfv8xzKq9qsGXdFS/3tndwUHErCeRMgCAAD8REHx\n",

"2YD9qRuvbKnZvyRgvQUhCwAA8KPvik+o//Mrz7ueHNdKL/6im4IIWK9CyAIAAL+3asdBjXlt/XnX\n",

"b4pvoxd+Hk/AeilCFgAA+K0Pvzmg8f/84rzrIxLa6I8/T1BggMMDW6G2CFkAAOB3ln1dqHvnf3ne\n",

"9e7REXrz3t4ErE0QsgAAwG9kbdmvB17fYDrLfXYoLyGwGUIWAAD4vHc27dXDb2wynRGw9kXIAgAA\n",

"n7V4wx5NXrTZdLYzLZmXENgcIQsAAHzOoi9265G3tpjO8tKSFUDA+gRCFgAA+IwF6ws0ZfFXpjMC\n",

"1vcQsgAAwPbmrftOU9/+2nS2Kz1ZDgcB64sIWQAAYFtzP9mlae9+YzojYH0fIQsAAGzn1TV5mp71\n",

"remMgPUfhCwAALCNOat2asbSbaYzAtb/ELIAAMDrjXltvVbtOGg6y58xzOJt4C0IWQAA4LV+8dfP\n",

"tC7v0HnXgwIcyk1L9sBG8CaELAAA8Dq3/OUTbSg4bDrjGVicQ8gCAACvMfylNfp671HTGQGLnyJk\n",

"AQCAx93wwirtOHDcdEbAojqELAAA8Jj+z3+s74pPms4IWFxIQF1ufPr0aY0YMUKxsbGKj4/X4MGD\n",

"lZubK0kqKirSkCFD1KlTJ3Xt2lWrV6+uvJ87ZgAAwL6uSV8hZ2qWacTmzxhGxKJW6vyM7IQJEzR0\n",

"6FA5HA7Nnj1b48eP18qVK5WamqqkpCQtW7ZM2dnZGjlypHbt2qXg4GC3zAAAgP10f2a5Dp04Yzoj\n",

"XlFXdQrZxo0bKzn5Pz/qIikpSTNnzpQkLVq0qPLZ2V69eqlNmzZatWqVBg0a5JYZAACwjyufXKYT\n",

"Z8pNZwQs6qtBr5GdNWuWbr75ZhUXF6u0tFStWrWqnDmdThUUFLhlZqakpEQlJSVVrpWXm3/BAAAA\n",

"a8Q89p7KKgzTGQGLhqp3yKalpSk3N1crVqzQqVOnXLlTvaSnp2vatGlVriUlJXloGwAA/JszNava\n",

"GQELV6nTN3udM3PmTC1evFhLly5VaGioIiMjFRQUpMLCwsrb5OfnKzo62i0zM1OmTNGRI0eqfCQm\n",

"Jtbn4QEAgHpypmZVG7F8Exdcrc4hm5GRoQULFmj58uWKiIiovD5q1CjNmTNHkpSdna29e/eqf//+\n",

"bpv9VEhIiMLDw6t8BAYG1vXhAQCAeiBg4QkOwzDMX7hiYs+ePWrbtq06dOigsLAwSWcD8vPPP9eB\n",

"Awd01113adeuXWrUqJFmz56tgQMHSpJbZrUxefJkZWRk1Pr2AACgbngJATypTiFrN4QsAADuQcDC\n",

"G/DOXgAAoNaqC9jgQIdynk02nQHuQsgCAIALqi5gLw4J0tfTbrR4G+AsQhYAAFSLlxDAmxGyAADg\n",

"PAQs7ICQBQAAlQhY2AkhCwAACFjYEiELAIAfI2BhZ4QsAAB+iICFLyBkAQDwIwQsfAkhCwCAjzMM\n",

"Q+2nvFftnICFXRGyAAD4KAIWvo6QBQDAxxCw8BeELAAAPqKiwlCHxwhY+A9CFgAAmyNg4a8IWQAA\n",

"bKqsvEIxjy81nQUGOLQzLdnijQBrEbIAANhMaXmFOlUTsGEhQfpq2o0WbwR4BiELAIBNnCmrUOwT\n",

"5gHbIixE6x8fZPFGgGcRsgAAeLnTpeW6fOoy01nbZhdpzSPXWbwR4B0IWQAAvNSpM+W64knzgO3c\n",

"Mkzv//paizcCvAshCwCAlzlRUqYrn3rfdBYf1VTvPNjX4o0A70TIAgDgJY6dLlXc7z8wnSW2b6ZF\n",

"E6+xeCPAuxGyAAB42JGTpYp/2jxg+8deqn+MTbR4I8AeCFkAADzkhxNn1O2Z5aazG7q01F9H97R4\n",

"I8BeCFkAACz2/fES9Zz+oenspvg2eumObhZvBNgTIQsAgEUOHD2tq9NWmM5G9YjS86PiLd4IsDdC\n",

"FgAAN9t3+JR6z/jIdHZnUrSmj4izeCPANxCyAAC4ye5DJ9XvDx+bzsb1ba+pw7tYvBHgWwhZAABc\n",

"LP/7Exowc6Xp7P4BHfXIkMutXQjwUYQsAAAuklt0XIMyVpnOJg3qpEmDYi3eCPBthCwAAA20rfCo\n",

"hvxpjenskSGddf+AGIs3AvwDIQsAQD19vfeIhr+01nT2xLArNL5fB4s3AvwLIQsAQB1t2n1YI/78\n",

"iensmZuv1F3XOK1dCPBThCwAALX0Rf4h3TbnM9PZc7fG6fZe0RZvBPg3QhYAgAv4bGex7nhlneks\n",

"4+fxuqV7lMUbAZAIWQAAqrUm56Du+tt609lLd3TTTfFtLN4IwH8jZAEA+ImPth3Q2L9/YTp7+a4e\n",

"uvHKVhZvBMAMIQsAwI/e31qoifO+NJ29ltJT113e0uKNANSEkAUA+L13N+/T/yzYaDqbNy5R/Tpd\n",

"avFGAGqDkAUA+K3FG/Zo8qLNprMF9yTpmo6RFm8EoC4IWQCA31mYXaBHM78ynb117zXq6Wxm8UYA\n",

"6oOQBQD4jXmf5WvqO1tNZ28/0EcJbSOsXQhAgxCyAACf9+qaPE3P+tZ09u//6auulzW1eCMArkDI\n",

"AgB81l9W5uoPy7abzt6fdK06twqzeCMArkTIAgB8zmNLvtLrnxeYzj6c3F8xLS62eCMA7kDIAgB8\n",

"xuSFm7R4417T2crfDpCzeROLNwLgToQsAMD2Hvi/Dcr6ar/pbM0jA9W2WajFGwGwAiELALCtsX/P\n",

"1kfbikxnq343QO0ieQYW8GWELADAdn7x18+0Lu+Q6eyT1Ot0WcRFFm8EwBMIWQCAbYz8yyfaWHDY\n",

"dPb5Y9erZXhjaxcC4FGELADA6w3502ptKzxmOst+fJAuDQuxeCMA3oCQBQB4rWv/8LEKDp00nW2Y\n",

"OljNmjSyeCMA3oSQBQB4nV7PfqiDx0pMZ5ufvEFNQ4Mt3giANwqoy40feughOZ1OORwObdq0qfK6\n",

"0+lU586dlZCQoISEBC1cuLBylpOTo969eys2Nla9evXS1q1bGzwDAPimK59cJmdqlmnEfvX7G5Q/\n",

"YxgRC6BSnUL2tttu09q1a9WuXbvzZgsXLtSmTZu0adMm3X777ZXXJ06cqAkTJmjHjh169NFHlZKS\n",

"0uAZAMC3tJ+SJWdqlk6cKT9v9s3TNyp/xjCFNSZgAVTlMAzDqOudnE6n3n77bSUkJJh+fk5RUZFi\n",

"YmJ06NAhBQUFyTAMtW7dWmvXrlV4eHi9ZjExMbXec/LkycrIyKjrwwMAWMSZmlXtbNszQ9Q4ONDC\n",

"bQDYjcteIzt69GgZhqHExETNmDFDl156qXbv3q3WrVsrKOjsb+NwOBQdHa2CggI1bdq0XrPqQrak\n",

"pEQlJVX/V1R5+fn/ZQ8A8LyaAnb79CEKCSJgAVxYnV5aUJ3Vq1dry5Yt2rBhg5o3b64xY8a44pet\n",

"k/T0dDVt2rTKx/r16y3fAwBQPWdqVrURm/PsUOXPGEbEAqg1lzwjGx0dLUkKDg7WpEmTFBsbK0lq\n",

"27at9u/fr7KyssqXCBQUFCg6Olrh4eH1mlVnypQpmjx5cpVrU6dOdcXDAwA0UE3PwOY+O1RBgS55\n",

"XgWAn2nwPzlOnDihw4cPV36+YMECdevWTZLUokULde/eXfPnz5ckZWZmKioqSjExMfWeVSckJETh\n",

"4eFVPgID+a96APCkmp6B3ZmWrPwZw4hYAPVWp2/2mjhxorKyslRYWKjIyEiFhYXpgw8+0K233qry\n",

"8nIZhqEOHTpo1qxZcjqdkqTt27crJSVFxcXFCg8P19y5cxUXF9egWW3xzV4A4Bk1PQObl5asgACH\n",

"hdsA8FX1+qkFdkHIAoC1agrYXenJcjgIWACuwzt7AQAajIAF4AmELACg3moK2PwZwyzcBIA/ImQB\n",

"AHVGwALwBoQsAKDWCFgA3oSQBQBcEAELwBsRsgCAahGwALwZIQsAOA8BC8AOCFkAQCUCFoCdELIA\n",

"AAIWgC0RsgDgxwhYAHZGyAKAHyJgAfgCQhYA/AgBC8CXELIA4AcIWAC+iJAFAB9GwALwZYQsAPgg\n",

"AhaAPyBkAcCHELAA/AkhCwA+gIAF4I8IWQCwMQIWgD8jZAHAhghYACBkAcBWCFgA+A9CFgBsgIAF\n",

"gPMRsgDgxQhYAKgeIQsAXoiABYALI2QBwIsQsABQe4QsAHgBAhYA6o6QBQAPMQxD7ae8V+2cgAWA\n",

"mhGyAGAxAhYAXIOQBQCLELAA4FqELAC4WUWFoQ6PEbAA4GqELAC4SXmFoY4ELAC4DSELAC5WWl6h\n",

"To8vrXZOwAKAaxCyAOAiZ8oqFPsEAQsAViFkAaCBTpeW6/Kpy6qdE7AA4B6ELADU08kzZery5PvV\n",

"zglYAHAvQhYA6uh4SZm6PkXAAoCnEbIAUEtHTpUqftoH1c4JWACwFiELABdw6MQZdX9mebVzAhYA\n",

"PIOQBYBqHDxWol7PfljtnIAFAM8iZAHgJwqPnFZS+grTWZNGgdr69BCLNwIAmCFkAeBHe344qb7P\n",

"fWw6a35xiL54YpDFGwEAakLIAvB7+d+f0ICZK01n0c1CtfqRgdYuBACoFUIWgN/KLTqmQRmrTWeX\n",

"twrTsknXWrwRAKAuCFkAfmdb4VEN+dMa01n36Agtvr+PxRsBAOqDkAXgN77ac0Q3zV5rOusb01zz\n",

"x19t8UYAgIYgZAH4vE93fq9fvvK56WzQFS316pieFm8EAHAFQhaAz1q146DGvLbedHZTfBu9dEc3\n",

"izcCALgSIQvA5yz/5oDu+ecXprNbul+mjJ8nWLsQAMAtCFkAPuPfW/bpwdc3ms6GXdVaf/5ld4s3\n",

"AgC4EyELwPYyv9yj37y52XQ2qkeUnh8Vb/FGAAArELIAbOv1zwv02JKvTGdjrmmnaTd3tXgjAICV\n",

"CFkAtvPa2l16+t/fmM4mXttBU5KvsHgjAIAnELIAbOMvK3P1h2XbTWcPX99Jvx4ca/FGAABPImQB\n",

"eL0Xlu/QrBU5prNHh1yu+wZ0tHgjAIA3CKjLjR966CE5nU45HA5t2rSp8npOTo569+6t2NhY9erV\n",

"S1u3bnXrDIB/SH/vWzlTs0wj9qmbuih/xjAiFgD8WJ1C9rbbbtPatWvVrl27KtcnTpyoCRMmaMeO\n",

"HXr00UeVkpLi1hkA3/bkO1/LmZqll1fnnTdLGxmn/BnDdHef9h7YDADgTRyGYRh1vZPT6dTbb7+t\n",

"hIQEFRUVKSYmRocOHVJQUJAMw1Dr1q21du1ahYeHu3wWExNjulNJSYlKSkqqXJs6dapmzZpVvz8Z\n",

"AJb73Zub9eaXe0xnGT+P1y3doyzeCADgzRr8Gtndu3erdevWCgo6+0s5HA5FR0eroKBATZs2dfms\n",

"upBNT0/XtGnTqlxLSkpq6MMDYIEHXt+grC37TWezf9lNw69qY/FGAAA78Jlv9poyZYomT55c5drU\n",

"qVM9tA2A2vjZ7LXasueI6eyV0T01uEtLizcCANhJg0O2bdu22r9/v8rKyipfBlBQUKDo6GiFh4e7\n",

"fFadkJAQhYSEVLkWGBjY0IcHwA0GZaxSbtFx09k/xiaqf+ylFm8EALCjOn2zl5kWLVqoe/fumj9/\n",

"viQpMzNTUVFRiomJccsMgH1dnfahnKlZphH7j7GJyp8xjIgFANRanb7Za+LEicrKylJhYaEiIyMV\n",

"Fham3Nxcbd++XSkpKSouLlZ4eLjmzp2ruLg4SXLLrLYmT56sjIyMOt0HgOtd/8eV2nnwhOns9Xuu\n",

"Vu+OzS3eCADgC+r1UwvsgpAFPOua9BXaf+S06SzzvmvUo10zizcCAPgSn/lmLwDeI+737+vY6TLT\n",

"2b8e7KOroiKsXQgA4JMIWQAu02FKliqq+X88H07ur5gWF1u7EADApxGyABrMmZpV7WzV7waoXWQT\n",

"C7cBAPgLQhZAvdUUsGsfHaioS0It3AYA4G8IWQB1VlPAfv7Y9WoZ3tjCbQAA/oqQBVBrNQXsF08M\n",

"UvOLQ6qdAwDgaoQsgAuqKWA3PTlYEaGNLNwGAICzCFkA1aopYLf8/gaFNw62cBsAAKoiZAGcp6aA\n",

"3TrtRjUJ4R8dAADP499GACrVFLDbnhmixsGBFm4DAEDNCFkANQbs9ulDFBJEwAIAvA8hC/ixmgI2\n",

"59mhCg4MsHAbAADqhpAF/FBNAZv77FAFEbAAABsgZAE/UlPA5qUlKyDAYeE2AAA0DCEL+IGaAnZX\n",

"erIcDgIWAGA/hCzgwwhYAIAvI2QBH1RTwObPGGbhJgAAuA8hC/gQAhYA4E8IWcAHELAAAH9EyAI2\n",

"RsACAPwZIQvYEAELAAAhC9gKAQsAwH8QsoANELAAAJyPkAW8GAELAED1CFnACxGwAABcGCELeBEC\n",

"FgCA2iNkAS9AwAIAUHeELOBBBCwAAPVHyAIeQMACANBwhCxgIQIWAADXIWQBCxCwAAC4HiELuBEB\n",

"CwCA+xCygBsQsAAAuB8hC7gQAQsAgHUIWcAFCFgAAKxHyAINQMACAOA5hCxQDwQsAACeR8gCdUDA\n",

"AgDgPQhZoBYIWAAAvA8hC9SAgAUAwHsRssBPGIah9lPeq3ZOwAIA4B0IWeBHBCwAAPZCyMLvEbAA\n",

"ANgTIQu/VVFhqMNjBCwAAHZFyMLvlFcY6kjAAgBge4Qs/EZZeYViHl9a7ZyABQDAXghZ+LzS8gp1\n",

"ImABAPA5hCx8VklZuTo/sazaOQELAIC9EbLwOadLy3X5VAIWAABfR8jCZ5w8U6YuT75vOgtwSHnp\n",

"BCwAAL6EkIXtHTtdqrjff2A6uzgkSF9Pu9HijQAAgBUIWdhWTQF7aViIsh8fZPFGAADASgGu/MWc\n",

"Tqc6d+6shIQEJSQkaOHChZKknJwc9e7dW7GxserVq5e2bt1aeZ/6zuC/jpwqlTM1yzRinZGhyp8x\n",

"jIgFAMAPuPwZ2YULFyohIaHKtYkTJ2rChAlKSUnRW2+9pZSUFGVnZzdoBv/zw4kz6vbMctPZ5a3C\n",

"tGzStRZvBAAAPMlhGIbhql/M6XTq7bffrhKyRUVFiomJ0aFDhxQUFCTDMNS6dWutXbtW4eHh9ZrF\n",

"xMSc93uXlJSopKSkyrWpU6dq1qxZrnp48JDvj5eo5/QPTWc/i2+jF+/oZvFGAADAG7j8GdnRo0fL\n",

"MAwlJiZqxowZ2r17t1q3bq2goLO/lcPhUHR0tAoKCtS0adN6zcxCNj09XdOmTatyLSkpydUPDxYq\n",

"OnpaiWkrTGejekTp+VHxFm8EAAC8iUtfI7t69Wpt2bJFGzZsUPPmzTVmzBhX/vI1mjJlio4cOVLl\n",

"IzEx0bLfH66z7/ApOVOzTCP2zqRo5c8YRsQCAADXPiMbHR0tSQoODtakSZMUGxurtm3bav/+/Sor\n",

"K6t8iUBBQYGio6MVHh5er5mZkJAQhYSEVLkWGBjoyocHN9t96KT6/eFj09nYPu315E1dLN4IAAB4\n",

"M5c9I3vixAkdPny48vMFCxaoW7duatGihbp376758+dLkjIzMxUVFaWYmJh6z+Bb8r8/IWdqlmnE\n",

"3j+go/JnDCNiAQDAeVz2zV55eXm69dZbVV5eLsMw1KFDB82aNUtOp1Pbt29XSkqKiouLFR4errlz\n",

"5youLk6S6j2rjcmTJysjI8MVDw9ukFt0XIMyVpnOJg3qpEmDYi3eCAAA2IlLf2qBtyFkvVP+9yc0\n",

"YOZK09kjQzrr/gE86w4AAC6Md/aCZXYePK7r/2j+DOzU4V00rm97izcCAAB2RsjC7XYcOKYbXlht\n",

"Onvu1jjd3sv8G/gAAABqQsjCbb7Zd1TJL64xnb18Vw/deGUrizcCAAC+hJCFy32154humr3WdDY3\n",

"pZcGXt7C4o0AAIAvImThMhsLftDIv3xqOps3LlH9Ol1q8UYAAMCXEbJosC/yD+m2OZ+Zzl6/52r1\n",

"7tjc4o0AAIA/IGRRb5/tLNYdr6wznb157zXq5Wxm8UYAAMCfELKoszU5B3XX39abzpbc31vdoi+x\n",

"eCMAAOCPCFnU2sfbinT337NNZ+8+2FdxUU0t3ggAAPgzQhYX9MHWQk2Y96Xp7L2H+qlLm3CLNwIA\n",

"ACBkUYP3vtqv+/9vg+nsg19fq9iWYRZvBAAA8B+ELM7zzqa9eviNTaazDyf3V0yLi61dCAAAwAQh\n",

"i0pvfblHv31zs+ls5W8HyNm8icUbAQAAVI+QhRasL9CUxV+ZztY8MlBtm4VavBEAAMCFEbJ+7J+f\n",

"5evJd7aazj5NvU5tIi6yeCMAAIDaI2T90Ktr8jQ961vT2eePXa+W4Y0t3ggAAKDuCFk/8r8rd+q5\n",

"ZdtMZ9mPD9KlYSEWbwQAAFB/hKwfeHFFjjKW7zCdffnEIEVeTMACAAD7IWR92MLsAj2aaf5NXJue\n",

"HKyI0EYWbwQAAOA6hKwPmrfuO019+2vT2eanblDTi4It3ggAAMD1CFkfMveTXZr27jems2+fHqKL\n",

"GgVavBEAAID7ELI+4JXVeXr2PfOfQrDtmSFqHEzAAgAA30PI2ti7m/fpfxZsNJ1tnz5EIUEELAAA\n",

"8F2ErA1lbdmvB17fYDrbMX2oGgUFWLwRAACA9QhZG/nX5n16qJpnYHOeHargQAIWAAD4D0LWBpZs\n",

"3KNfL9xsOtuZlqzAAIfFGwEAAHgeIevF3vxit3731hbTWV5asgIIWAAA4McIWS/0xvoCpS42fyMD\n",

"AhYAAOAsQtaL1PRGBrvSk+VwELAAAADnELJe4O+f7NLvq3kjAwIWAADAHCHrQa+uydP0LPM3MiBg\n",

"AQAAakbIesCcVTs1Y+k20xkBCwAAUDuErIX+/HGunn9/u+ksf8Ywi7cBAACwN0LWAp/u/F6/fOXz\n",

"864HBTiUm5bsgY0AAADsj5B1o09zv9cvXz0/YJs0CtTWp4d4YCMAAADfQci6wdqc73Xn384P2C6t\n",

"w/Xew/08sBEAAIDvIWRdaNWOgxrz2vrzrj+WfLkmXNvRAxsBAAD4LkLWRX7x18+0Lu9QlWtTh3fR\n",

"uL7tPbQRAACAbyNkXSTv4InKv37qpi66uw8BCwAA4E6ErIssvr+3Dh4rUbfoSzy9CgAAgF8gZF0k\n",

"6pJQRV0S6uk1AAAA/EaApxcAAAAA6oOQBQAAgC0RsgAAALAlQhYAAAC2RMgCAADAlghZAAAA2BIh\n",

"CwAAAFsiZAEAAGBLhCwAAABsiZAFAACALRGyAAAAsCWHYRiGp5dwl1tuuUVOp9PTa8AFysvLtX79\n",

"eiUmJiowMNDT68CNOGv/wVn7D87af9TnrNu1a6eHH364Xr+fT4csfMfRo0fVtGlTHTlyROHh4Z5e\n",

"B27EWfsPztp/cNb+w+qz5qUFAAAAsCVCFgAAALZEyAIAAMCWCFnYQkhIiJ566imFhIR4ehW4GWft\n",

"Pzhr/8FZ+w+rz5pv9gIAAIAt8YwsAAAAbImQBQAAgC0RsgAAALAlQhYe43Q61blzZyUkJCghIUEL\n",

"Fy6UJOXk5Kh3796KjY1Vr169tHXr1sr71HcGaz300ENyOp1yOBzatGlT5XV3nC3n7lnVnXV1X98S\n",

"Z21Hp0+f1ogRIxQbG6v4+HgNHjxYubm5kqSioiINGTJEnTp1UteuXbV69erK+7ljBveq6awHDBig\n",

"9u3bV35dv/DCC5X389hZG4CHtGvXzti4ceN51wcOHGjMnTvXMAzDePPNN42ePXs2eAZrrVq1yti9\n",

"e/d5Z+yOs+XcPau6s67u69swOGs7OnXqlJGVlWVUVFQYhmEYL730ktG/f3/DMAzj7rvvNp566inD\n",

"MAxj/fr1xmWXXWacOXPGbTO4V01n3b9/f2PJkiWm9/PUWROy8Bizf9EdOHDACAsLM0pLSw3DMIyK\n",

"igqjZcuWRk5OTr1n8Jz/PmN3nC3n7j1qG7KctW/Izs422rVrZxiGYTRp0sTYv39/5axXr17G8uXL\n",

"3TaDtf77rGsKWU+dNS8tgEeNHj1acXFxGjdunA4ePKjdu3erdevWCgoKkiQ5HA5FR0eroKCg3jN4\n",

"B3ecLefu3X769S255+8DWG/WrFm6+eabVVxcrNLSUrVq1apy5nQ6VVBQ4JYZrHfurM9JTU1VXFyc\n",

"br/9duXl5UmSR8+akIXHrF69Wlu2bNGGDRvUvHlzjRkzxtMrAXARvr59V1pamnJzc5Wenu7pVeBm\n",

"Pz3refPmadu2bdqyZYv69eun4cOHe3hDQhYeFB0dLUkKDg7WpEmTtGbNGrVt21b79+9XWVmZJMkw\n",

"DBUUFCg6OrreM3gHd5wt5+69zL6+Jff8fQDrzJw5U4sXL9bSpUsVGhqqyMhIBQUFqbCwsPI2+fn5\n",

"io6OdssM1vnpWUtnv36ls/9H5MEHH1ReXp6Ki4s9etaELDzixIkTOnz4cOXnCxYsULdu3dSiRQt1\n",

"795d8+fPlyRlZmYqKipKMTEx9Z7BO7jjbDl371Td17fknr8PYI2MjAwtWLBAy5cvV0REROX1UaNG\n",

"ac6cOZKk7Oxs7d27V/3793fbDO5ndtZlZWU6cOBA5W0yMzPVsmVLRUZGSvLgWdf61bSAC+3cudNI\n",

"SEgw4uLijK5duxo/+9nPjF27dhmGYRjbtm0zkpKSjE6dOhk9evQwtmzZUnm/+s5grQkTJhiXXXaZ\n",

"ERgYaLRo0cLo2LGjYRjuOVvO3bPMzrqmr2/D4KztaPfu3YYko0OHDkZ8fLwRHx9vJCYmGoZhGIWF\n",

"hcbgwYONmJgYo0uXLsZHH31UeT93zOBe1Z318ePHjR49ehhdu3Y1rrrqKuO6664zNm3aVHk/T521\n",

"wzAMowHRDgAAAHgELy0AAACALRGyAAAAsCVCFgAAALZEyAIAAMCWCFkAAADYEiELAAAAWyJkAQAA\n",

"YEuELAAAAGyJkAUAAIAtEbIAAACwJUIWAAAAtvT/HMoaQUBxlXwAAAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-fe4b6887-23ca-4a6f-be46-fefc5a79d609\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-fe4b6887-23ca-4a6f-be46-fefc5a79d609\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_36['Height(Inches)'].plot(kind='line', figsize=(8, 4), title='Height(Inches)')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-f30d8e38-72b7-441d-a9b1-cc153c4698fb\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAAEAAElEQVR4nOydd3xTZfvGr4zuNt0r3S3QTYG2rLL3XrJEREFREF9FcbzOnxN8\n",

"XYgLEFFRUBkKCLL3hpYO6KJ7pnslaZp5zu+PJKcNTUtbmnQ938+HT2l6cs6TjuTKc9/XdbNomqZB\n",

"IBAIBAKBQCAYEHZXL4BAIBAIBAKB0PshopNAIBAIBAKBYHCI6CQQCAQCgUAgGBwiOgkEAoFAIBAI\n",

"BoeITgKBQCAQCASCwSGik0AgEAgEAoFgcIjoJBAIBAKBQCAYHCI6CQQCgUAgEAgGh4hOAoFAIBAI\n",

"BILBIaKTQCD0ajZu3IgpU6a0+fgLFy6AxWJBqVS2+1oKhQLh4eG4detWu+/bFn755Rd4enoa5NwA\n",

"MHv2bPzyyy8GOz+BQOjbENFJIBC6LePGjcPbb7/d7PYnn3wSy5cvb9M53nzzTZw6dcoo69q6dSsC\n",

"AgIwdOhQAEBeXh5YLBaysrI69fqG4qOPPsLrr7+OhoaGrl4KgUDohRDRSSAQCJ0ARVHYvHkznnnm\n",

"ma5eSoeJiIiAj48Pdu/e3dVLIRAIvRAiOgkEQo9GKpXizTffREBAAOzt7TFmzBgkJCQwX3/vvfcw\n",

"atQo5vOysjLMmzcPdnZ28Pf3x549e8BisXDhwgWd8x46dAgDBgyAjY0NJk+ejOLiYgDAmjVrcPny\n",

"ZXz66aewtraGtbU1ACA+Ph4CgQDjx49vca3a0v2BAwf0nhsAGhoa8PbbbzNf9/f3x65du3TOs337\n",

"dvj6+sLW1haLFi2CUChkvlZbW4u1a9fCx8cHjo6OmDFjBnJycpiv79u3D6GhoeDxeHBycsKkSZN0\n",

"zj1t2jT8/fffD/q2EwgEQrshopNAIPRo1qxZg1u3buHixYuoqKjA4sWLMXXqVNTW1uo9ftmyZVCp\n",

"VMjNzcXt27exb98+vccdPHgQsbGxKCoqgkQiwZtvvgkA2LZtG0aPHo3XXnsNYrEYYrEYABAXFwd/\n",

"f39YWFg8cM0tnRsAVq9ejVOnTuHw4cMQCoW4cuUKwsPDma+XlpYiPT0daWlpSE9PR2JiIr744gsA\n",

"AE3TmD9/PoRCIRISEiAQCBAeHo5Zs2ZBoVBAIpFg+fLl+OabbyAUClFUVKRzbQAYOHAgYmNjH/gY\n",

"CAQCob0Q0UkgELo1n3/+Oezs7HT+/f777wCAqqoq7Nq1C9999x08PT3B5XLx/PPPw9bWFkePHm12\n",

"rqKiIpw7dw7/+9//YG9vD3t7e3z88cd6r7tp0ybY2trC1tYWy5Yte6A5qLq6Gra2tm16TC2du7Ky\n",

"Env27MH333+P4OBgsFgs8Pl8DBkyhLkvl8vFp59+CgsLC7i7u2PevHnM/RMSEnD16lVs374dDg4O\n",

"MDMzw8aNG5Gbm4ubN28CAExMTJCWlobKykqYm5tjwoQJOmuztbVFTU1Nmx4HgUAgtAciOgkEQrfm\n",

"lVdeQW1trc6/ZcuWAQBj0Bk2bJiOKC0uLkZRUVGzc2nL2D4+Psxtvr6+eq/L5/OZ/1tZWUEkErW6\n",

"TgcHB9TV1bXpMbV07tzcXABAYGBgi/d1cnKCiYmJ3vtnZmZCqVTC09OT+V44OjoCAAoLC2FpaYkT\n",

"J07gzJkzCAwMRHh4OLZs2aJz/rq6Otjb27fpcRAIBEJ74Hb1AggEAqGjuLm5AQDu3LkDb2/vBx7v\n",

"4eEBAMjPz0dISAjz//bCZjd/vx4ZGYmcnBxIpVKYm5u3+5xAowDOyMhAZGRku+/v5uYGU1NTVFRU\n",

"6AjTpowePRqjR48GTdO4ePEipk2bhpCQEEyePBkAcPfuXURFRXVo/QQCgdAaZKeTQCD0WHx8fDBv\n",

"3jysW7eOEY8ikQjHjx9HSUlJs+M9PT0xbtw4vPHGG8yuqb7oowfh5uaGjIwMndsiIyPh7u6O8+fP\n",

"d+zBAHB2dsajjz6KdevW4d69ewCAkpISxMfHt+n+o0aNQlhYGNauXYvy8nIAQE1NDf766y9IJBKU\n",

"lpZi//79qK2tBYvFgp2dHVgsFrjcxv2HEydOYP78+R1+DAQCgdASRHQSCIQeze+//47IyEhMnjwZ\n",

"NjY2CAwMxI4dO0DTdIvH0zQNHx8fDB48GHPmzAGAdu1ObtiwAffu3YO9vT3s7OwAqHc/169fj+3b\n",

"tz/U49mxYwfGjh2L6dOnw9raGjExMUhJSWnTfTkcDk6fPg1LS0sMGzYMNjY2iIiIwMGDB8FisUDT\n",

"NLZt2wZ/f39YW1tj4cKF+PjjjxnH/Z07d5Cbm4vHH3/8oR4DgUAg6INFt/TMTCAQCH2AxMREDB48\n",

"GAKBAO7u7g91LoVCgcGDB+Onn35iAuJ7EnPmzMH8+fOxcuXKrl4KgUDohRDRSSAQ+hTJycmQy+UY\n",

"NGgQBAIBVqxYAQA4d+5cF6+MQCAQejekvE4gEPoUdXV1WLp0KWxsbBAZGQknJyfs2bOnq5dFIBAI\n",

"vR6y00kgEAgEAoFAMDhkp5NAIBAIBAKBYHCI6CQQCAQCgUAgGBwiOgkEAoFAIBAIBoeITgKBQCAQ\n",

"CASCwek2ovP++b8EAoFAIBAIhN5DtxGdHZl/TCAQCAQCgUDoGXQb0UkgEAgEAoFA6L0Q0UkgEAgE\n",

"AoFAMDhEdBIIBAKBQCAQDA4RnQQCgUAgEAgEg0NEJ4FAIBAIBALB4BDRSSAQCAQCgUAwOER0EggE\n",

"AoFAIBAMDhGdBAKBQCAQCASDQ0QngUAgEAgEAsHgENFJIBAIBAKBQDA4RHQSCAQCgUAgEAwOt6sX\n",

"QCAQCITuQ61EjhSBEMnFdUgRCMHlsLBxfjjMTThdvTQCgdDDIaKTQCAQ+iA0TaNUKEVKsRDJArXA\n",

"TBUIUVzb0OzYtWMD0N/VpgtWSSAQehNEdBIIBEIvh6Jo5FXVq3cwBXVIFQiRIhCiul6u93g3njlK\n",

"hVIAwMxwdyI4CQRCp0BEJ4FAIPQi5EoKmeUipAiESNGUyNNKhKiXq5ody2Gz0M/ZGqEePITybRHK\n",

"5yGEz8N357Ow/WIOnKxN8eG8sC54FAQCoTfSLtFZVVWFiRMnMp9LJBLk5OSgvLwcGzZswNWrV2Fh\n",

"YQFra2t89dVXiI6O7vQFEwgEAkGNRK5EWolQpwczs0wMuYpqdqwZl40gdx7C+I0CM9DNplmv5u38\n",

"Guy4lAMA+Hh+OBysTI3yWAgEQu+nXaLT0dERiYmJzOeff/45Ll68CAcHB8yfPx87duwAl8vF0aNH\n",

"sWjRIuTl5XXycgkEAqFvUlOvNvikCOqQrPmYW1kPmm5+rI05F6F8HsL4tswupr+TFbic1gNLGuQq\n",

"vLI/CRQNLBjsgamhbgZ6NAQCoS/yUOX1nTt3YtOmTQCAOXPmMLcPHz4cxcXFUCqV4HJJBZ9AIBDa\n",

"Ck3TKKmTNgrMYiFSBXUQ1En1Hu9iY6YWmB7q3ctQvi087S3AYrHafe1PT6Yjt7Ierjwz/N/s0Id9\n",

"KAQCgaBDhxXhtWvXUFNTg1mzZjX72pYtWzBjxowWBadMJoNMJtO5TaVq3m9EIBAIvRmKopGrMfik\n",

"COqQUqz+WCNR6D3ex9GSEZbaj842Zp2yluvZVfj5ah4A4H+PDIStpUmnnJdAIBC0dFh07ty5EytW\n",

"rGgmLHfv3o19+/bh0qVLLd5306ZNeP/993VuGz58eEeXQiAQCN0euZJCRplI4xxXl8jTSoSQtGDw\n",

"6e9ijRBtiZzPQzCfB565YYSgWKbEqweSAABLo70wLtDFINchEAh9GxZN6+sIah2xWAx3d3fExsYi\n",

"KCiIuX3v3r14++23cfbsWXh7e7d4f307ne+88w62bNnS3qUQCARCt6Ne1mjw0ZbIM8tFUKiaP92a\n",

"m7AR5MbTKZEPcG1u8DEkbx68i99vFsDDzgIn1o+GjYHELYFA6Nt0aKdz7969iIiI0BGc+/btw9tv\n",

"v40zZ860KjgBwMzMDGZmuiUhDodMuyAQCD2P6nq5ujSuyb5MKa5DbpV+gw/PnMuUxrUC068NBh9D\n",

"cimjAr/fLAAAfLZwIBGcBALBYHRIdO7cuROrV6/Wue2xxx6Dm5sb5s6dy9x29uxZODo6PtwKCQQC\n",

"oRtA0zQEdVIm+1K7i1nSgsHHlWem03sZyud12OBjKOoaFHj9rzsAgCdG+GBkP6cuXhGBQOjNdEh0\n",

"Xrt2rdltCoX+xncCgUDoaagoGrmV9UhpMr2nNYOPr6OlWlg2CVl3su4cg48h+fBoKkrqpPB1tMTr\n",

"04MefAcCgUB4CEieEYFA6NPIlCpklol1SuQtGXy4bBb6uVgjlG+LMI3ADHa36ZEl6bNpZThwuwgs\n",

"FvD5oghYmpKXAwKBYFjIswyBQOgziLUGnyYl8tYMPsHuvMaQdb4t+rtaG9XgYyhq6uX47993AQBP\n",

"j/JDlK9DF6+IQCD0BYjoJBAIvZIqsUyn9zJVIGzR4GNrYaLpvWxq8LEGh919+i87k3f/SUGFSIYA\n",

"ZytsmBLY1cshEAh9BCI6CQRCj0Zr8NHOHk/VlMlbMvi48cwZgRmqEZgedt3L4GNIjt0twZEkAThs\n",

"Fr5YPKhX7NwSCISeARGdBAKhx9DU4MNM8REIUduCwcfPyQoh/MYSeUgPMfgYikqxDG8fSgYArB0b\n",

"gEFedl27IAKB0KcgopNAIHRLtAaf5OJGgZlWIkKDQr/Bp7+rjU6JPNidB2sz8hSnhaZpvHXwLqrr\n",

"5Qhys8ELE/t39ZIIBEIfgzwjEwiELkdr8EluavApE0FJNW/AtDDhINjdRidkvb+rNcy4pEzcGocT\n",

"BTiZUgYum4UvFkfAlNt1gfQEAqFvQkQngUAwKlqDT7JA24MpRF4LBh87SxOdcPVQvi38nKx6rcHH\n",

"UJQJpXj3sLqs/sLE/gjl23bxiggEQl+EiE4CgWAQaJpGcW0DMxpSu4NZKtRv8HG3VRt8QprsYPJt\n",

"zfuMwcdQ0DSN1/+6A6FUiXAPW6wdF9DVSyIQCH0UIjoJBMJDozb4iNU7mE0EZl1Dc4MPiwX4OWoN\n",

"PrZMH6ZjHzb4GJJ9cYW4cK8Cphw2vlgcAZMunPNOIBD6NkR0EgiEdiFTqpBRKtaUx9UCM70Fg48J\n",

"h4X+LjY6EUXE4GM8imok+PBoGgBgw5QBGOBq08UrIhAIfRnyzE8gEFpEJFUgrUSk4yDPKhfrNfhY\n",

"mnKYCT7a/kti8Ok6KEpdVhfLlIj0scfTo/27ekkEAqGPQ0QngUAAoM5w1JbHUzUCM69KovdYe0sT\n",

"pjQeQgw+3ZI9N/NxNasK5iZsfL4ogvxsCARCl0NEJ4HQx6BpGkU1DTrh6imCOpQJZXqP59uaM+Ye\n",

"bYmcGHy6N/lV9dh4LB0A8Pq0IPg5WXXxiggEAoGITgKhV6OiaORU6Bp8UktaN/hoR0NqS+QOVqZd\n",

"sHJCR1FRNF7dfwcNChWG+zvgiRG+Xb0kAoFAAEBEJ4HQa5AqVMgoE+kIzPRSIaQKqtmxWoNPmEej\n",

"gzzYnQcrYvDp8fx8NRe38qphZcrBZwsjwCZldQKB0E0grzAEQg9EJFVo+i7VIeupAuEDDT5hmp3L\n",

"ED4PA1xtyESaXkhWuRifnrwHAHhrZgi8HCy7eEUEAoHQCBGdBEI3p0Ik0+m9TBEIkf8gg0+THUxf\n",

"R2Lw6QsoVRQ27E+CXElhzABnPDrUq6uXRCAQCDoQ0UkgdBMaDT51OiXyclHrBp+mJXJ3YvDps2y/\n",

"lIOkwlrYmHPxv0fCye8BgUDodhDRSSB0AUoVhZzKerXALG4skQulymbHsliAn5MVQvm2OiVyYvAh\n",

"aEkvFeKrMxkAgP+bHQp3W4suXhGBQCA0h4hOAsHASBUq3CsVMeXxZIEQ6SVCyJT6DT4DXG2Y2eOh\n",

"fB6C3IjBh9AyciWFDfuSoFDRmBTsgkeGeHT1kggEAkEv5JWMQOhEhE0MPtpdzKwKMVR6DD5WTSf4\n",

"aARmfxdi8CG0j2/PZyFFIISdpQk2LiBldQKB0H0hopNA6CDlIqk691K7g1ksREG1foOPg5UpM70n\n",

"rInBh8TZEB6Gu0V1+O58FgDgw7lhcLEx7+IVEQgEQssQ0UkgPACaplFY3aDjIE8WCFHRgsHHw85C\n",

"MxpSIzA9eHDjEYMPoXORKVXYsD8RKorGzHB3zI7gd/WSCAQCoVWI6CQQmqBUUciuqG8WUSRqweDj\n",

"rzH4aHswQ9x5sCcGH4IR2Hw6ExllYjhZm+LDeWFdvRwCgUB4IER0EvosUoUK6aWiJgKzZYOPKYeN\n",

"AW7WCHVvzMAMdreBpSn5EyIYn/iCGvxwKRsA8PH8cJJkQCAQegTkFZPQJ6hrUDC9l1qjT2sGn5Am\n",

"0URhfFv0c7EmBh9Ct6BBrsIr+5JA0cD8wR6YGurW1UsiEAiENtEu0VlVVYWJEycyn0skEuTk5KC8\n",

"vBzbtm3Drl27kJmZib///hvz5s3r7LUSCG2iXCjVKY2nCFo2+DhamTICU1si93GwJAYfQrfls5P3\n",

"kFNZD1eeGd6bHdrVyyEQCIQ20y7R6ejoiMTERObzzz//HBcvXoSDgwMmTZqEpUuXYtWqVZ29RgJB\n",

"LzRNo6Ba0kxgtmbwCb1PYLryzIjBh9BjuJFThZ+u5gIAPnlkIGwtTbp4RQQCgdB2Hqq8vnPnTmza\n",

"tAkAMHTo0E5ZEIGgD6WKQlaFGCnFjRmYqSX6DT5sFuDvbK0RmI0i086S9L0Rei71MiVePZAEAFga\n",

"7YXxgS5dvCICgUBoHx0WndeuXUNNTQ1mzZrV7vvKZDLIZLq7USqVqqNLIfQypAoV0kqEzM5lqqAO\n",

"6aWiFg0+gW42jMAMIQYfQi9l47E0FFY3wMPOAm/NDO7q5RAIBEK76fAr886dO7FixQpwue0/xaZN\n",

"m/D+++/r3DZ8+PCOLoXQg6lrUOiYe1IEdciuqNdr8LE24yLEncdkYIbybdHf1RomHGLwIfRuLmdW\n",

"YM/NAgDAZwsHwsaclNUJBELPo0OiUywWY9++fYiNje3QRd944w28/PLLOre98847HToXoedQLpQi\n",

"WTMaMkUgREpJHQqrG/Qe62hlyoyG1ApMYvAh9EWEUgVeO3AHALBihA9G9nPq4hURCARCx+iQ6Ny7\n",

"dy8iIiIQFBTUoYuamZnBzMxM5zYOh9OhcxG6H1qDT3KxrsGnUqzf4ONpr2vwCeUTgw+BoOXDI6ko\n",

"qZPCx9ES/53esedcAoFA6A50SHTu3LkTq1ev1rnto48+wrZt21BRUYHk5GQ8//zzSEhIgLOzc6cs\n",

"lNA9UagoZGsMPskagZkmEEIk02/wCWAMPrbMLHJi8CEQ9HM2rQz7bxeBxQI+XxRBepUNgFJFQVAr\n",

"RX51PfKqJCio0n6UoLBGgrEDnLF1eWRXL5NA6BWwaJpu3jzXBbz88sv48ssvu3oZhFZokKuQXirU\n",

"iShKLxVB3oLBJ8jdhjH3hPJ5CHbjwcKU7GgTCG2hpl6OKV9dQoVIhtWj/fDWzJCuXlKPRapQoahG\n",

"grxKCfKrJcivqkd+lfpjUU0DlHp6yJtyYv1oBLnxjLRaAqH3Qt42E/RSJ1EgpURt8EkuVgvM7Aox\n",

"9D03W5txdcw9oXwe+rkQgw+B8DD83z8pqBDJEOBshQ1TArt6Od0esUzJiMm8qnoUNPlYIpSite0V\n",

"Uy4b3g6W8HW0hLeDFXydLOHtYImfr+bhYkYFDiYU443pRHQSCA8LEZ19HJqmUS6SqXcum5TIi2r0\n",

"G3ycrE11ei9D+Tx4E4MPgdCpHL9bgn+SBGCzgC8WD4K5CakQ0DSNGomimaDMq6pHQbUElWJ5q/e3\n",

"NuPCx9FS888KPg6aj46WcOOZ630OkypUuJhRgcMJArw2NQgc8jxHIDwURHT2IShKd4JPsiYDs6Un\n",

"a097C4RpBaaHWmS62BCDD4FgSCrFMrx1KBkAsHZcAAZ52XXtgowIRdEoE0mZ0rf6owT51fXIr5To\n",

"7RVvioOVqVpUNhGU2o+OVqbtfu4aH+QCWwsTlAqluJFThRiSHEAgPBREdPZSFCoKWeXixv7LYiFS\n",

"S4QQt2LwCfNoNPeEutuSEXsEgpGhaRpvH0xGdb0cQW42eGFi/65eUqejUFEQ1DbomHa0IrOgWqJ3\n",

"CERT3G3NNaVwK3g7qj/6OFrC29ESvE7OLzXjcjBzoDt+v1mAv+OLiegkEB4SIjp7AQ1yFdJKG6f3\n",

"JBcLca+sBYMPl40gN5smJXIegojBh0DoFhxOFOBESim4bBa+WBwBM27P/LuUKlQoqJbo7Fhqy+BF\n",

"NQ16hz9o4bBZ8LS3aFICV+9W+jpawsvB0uitBgsGe+D3mwU4kVyCj+aFkedKAuEhIKKzh1EnUTTJ\n",

"vlSXyHNaMPjYmHERzOfplMgDnInBh0DojpQJpXj3sLqs/p8J/RHKt+3iFbWOUKpgeirvL4eXCqWt\n",

"3teMy1bvTjqoxWTTMjjfzqJbPUdF+tjDy8EChdUNOJVairmDPLp6SQRCj4WIzm4KTdMoE8p0BWax\n",

"EMW1LRl8zBDmoesg97InBh8CoSdA0zT++9cdCKVKhHvY4rnxAV29JNA0jap6+X2Csl4TOSRBdX3r\n",

"xh0bMy58nBpNO03L4S42Zj3muYnFYmH+IA98fS4LBxOKiegkEB4CIjq7Gdezq7D1YjZSiutQ1cKT\n",

"updDE4OP5qMLz9zIKyUQCJ3F/rginL9XAVMOG18sjjDaTh9F0SgVSps4wSUoqK5HXqUEBdUSvT3g\n",

"TXGyNm3WX6n9aG9p0mtMh/OHeOLrc1m4nFmJCpEMzjZmD74TgUBoBhGd3YzvL6if2O6Hw2ZhfKAz\n",

"FkZ6YoS/EzH5EAi9hOLaBnxwNBUA8PKUARjgatOp51eoKBTVNOi6wTU7lgXVEr2931pYLMCdZ97M\n",

"Ca79v7VZ33gJ8XOywiAvOyQW1uKfJAGeGuXX1UsiEHokfeMZowexaUE4fr9Z0GxeuYqicSatHGfS\n",

"ygHozisPI3FGBEKPhKZpvH7gDsQyJYZ422H1aP8OnadBrjbu3J9dmVdVD0GttFXjDpfNgpeDZWM4\n",

"umNjn6WnvfGNO92VBUM8kFhYi4MJRUR0EggdhIjOboanvSVemxbEfF4ulKoD24vVIjRZUIeimgbm\n",

"38mUMubY+4PbwzzUwe1EiBII3ZPdNwtwJasS5iZsfL4ootXw8boGhW5vZZMMyzKhrNXrmJuw4eOg\n",

"u0vpoymDu9uag9uNjDvdlVkD+fjgSCqSi4XILBOhfyfvSBMIfQEiOrs5LjxzTOCZY0KQK3NbSyMq\n",

"K8VyXMyowMWMCuZYfQ72fs7W5EWGQOhi8qvqsfHfNADAa1OD4OdkhQqRrJlpR5tnWSNRtHo+njkX\n",

"vk5WejMsSRXk4XGwMsW4QGecSSvHwYRinc0BAoHQNlg03dpEWuPx8ssv48svv+zqZfRY9GZ1loog\n",

"VzXv1zLTZHWGaIRomIctgtxsSBmNQDAwKopGSV0D8iolWL7zJnN7kJsNCqolkMhVrd7fydpMUwJv\n",

"FJTaDEs7S1NDL7/P8++dEqz7PR4edha4/Nr4HuPAJxC6C2Sns5dgYcrBEG97DPG2Z27TTiXS7oam\n",

"ChqnEiUV1SGpqI45lsNmIcDZCmF8W/VEIs1HWwtiWCIQ2oNcSaGoptGwo3aEq/sri6ob9L4RTC8V\n",

"AVAbd/i2FveVwNV5lj6OlrDqI8ad7srEYBfYmHNRXNuAm7nVGBHg2NVLIhB6FOQZrBdjwmEj2J2H\n",

"YHceFmluoyga+dUSJv8zuVhdpq+qlyOjTIyMMjH+TihmzuHtYMlMLgrVjMl0sSHxTIS+jUSubOYE\n",

"15bFBbUNeoc16MOUy8Yb04MYkelpb9FjpxD1BcxNOJgZ7o4/YwtxMKGIiE4CoZ0Q0dnHYLNZ8HOy\n",

"gp+TFWYN5ANoDKLX7ohqBWlxbQMKNLEqx5NLmXM425ghrElGaJiHLTztLUjPGKFXUSuRN45vbJph\n",

"WSVBhah1446FCYcx7TTtr/S0t8B//kjAnaI6jO7vhF9XDSV/Nz2M+YM98GdsIY7fLcUHc8NIWxKB\n",

"0A6I6CSAxWLBzdYcbrbmmBTSaFiqqZcjtaRxGlKKoA45lfWoEMlw/l4Fzt9rNCzxzLkI0RqWNBFO\n",

"/k5WxLBE6LbQNK027lRLkFepjRhSm3byqiSoa2jduGNrYXJfxFCjO9zZWr9x5/sLWbhTVAcbMy7+\n",

"98hAIjh7ING+DvCws0BxbQPOpJUxb94JBMKDIaKT0CL2VqaI6eeEmH5OzG31MiXSNYallGJ1hFNG\n",

"mQhCqRI3cqpxI6eaOdbchI0gN55OhNMAV2JYIhgPFUVDUNvARAvdHzfUoGjduONiY9bYX+lgCR8n\n",

"zccOGHfSS4XYfDoDAPDu7BDw7Sw6/LgIXQebzcK8wXx8dz4bB+OLiegkENoBEZ2EdmFlxkWkjwMi\n",

"fRyY2+RKCpnlIo0Q1ZiWSoSQyFVILKxFYmEtcyyHzUJ/F+vGXVE+DyF8HmzMiWGJ0DFkShUKqxt0\n",

"xjdqS+KFNRIoVC03WLJZAN/OokkJXG3a8XVSh6VbmnbOU6RCRWHDviQoVDQmBbtgYaRnp5yX0DXM\n",

"H+yJ785n42JGBarEMjhak7GYBEJbIKKT8NCYctma/k5bIMoLgNqwlFtVz/SIajNFayQKpJeKkF4q\n",

"wt/xjYYlX0dLxjEfpjEsOZEncoKGeplSr2knv0oCQV0DWgt+M+Ww4eVg0Vj+brJj6WlvCVOu4VtA\n",

"vj2XhRSBEHaWJti4IJyU1Xs4/VysMdDTFneK6nAkSYAnY8iEIgKhLRDRSTAIbDYLAc7WCHC2xpyI\n",

"RsNSSZ2Ucc1rM0UFdVLkaYwa/94tYc7hyjNrshuqLs972BHDUm+EpmnUShSN4xsrm5bDJcw42Jaw\n",

"NOUweZVMhqVGXLrxzFud9GNokovr8N35LADAB3PDSPpDL2H+YA/cKarDwYRiIjoJhDZCRCfBaLBY\n",

"LPDtLMC3s8DkJoal6np5swin3Cr1aL8yYTnOppfrnGdkgCPjmg/l8+DnZN2looLQNmiaRrlIhrzK\n",

"5ruVeVX1EEmVrd7f3tKk0bTj0NS4YwUna9Nu+WZEplTh5X2JUFI0ZoS7YfZA965eEqGTmB3Bx0f/\n",

"piGpqA7ZFWIEOFt39ZIIhG4PEZ2ELsfByhSj+ztjdH9n5jaxTIm0EnWP6HtHUnWOv5ZdhWvZVczn\n",

"FiYcBLvb6MydH+BmTfIOuwClioKgVop8TbSQ1gleoDHySBXNg9Gb4sozY0w794907ImDCr46k4mM\n",

"MjEcrUzx4dywbimMCR3DydoMY/o74fy9ChxKKMaGKYFdvSQCodtDRCehW2JtxkW0rwOifR0wNcwN\n",

"s7+52mKJtUGhQnxBLeILapnbuGwW+rvaqHdENcH2we48WJOJLg+NVKFCUY22BC7RmRVeVNMAZSvJ\n",

"6GwW4GlvyUQL+Tg07lZ6O1jCwrT3vFGIL6jB9ovZAICP54cTs0kvZP4QT5y/V4GDCcV4adIAMhaT\n",

"QHgA5BWY0O1xt7XAtuVD8OiOG1CoaPg4WsKUw0ZmubjZsQHOVqgUy1HXoEBaiRBpJUIcuK3+GosF\n",

"+DlaMWM+wzR5og5WZGb1/YikCuRX6TrBtR9LhNLWjTtctmaHUtcJ7utoBQ97C5j0gezWBrkKr+xL\n",

"AkUD8wbxMS3MrauXRDAAU0JcYW3GRVFNA+LyazDUz+HBdyIQ+jBEdBJ6BFG+Dvhgbhje+PsuCqol\n",

"2PF4FBytTbEvrhBHkkoglqn7AXMr6zEu0AUx/ZzgyjNDRqkmykkgRKlQipzKeuRU1uPonUbDkrut\n",

"eZPSvHpXlG9r3qtLoTRNo7pe3qy3Uvv/qnp5q/e3NuM27lZqTTuaHks3nnmf3/H57OQ95FTWw5Vn\n",

"hvfnhHX1cggGwtyEg+lhbth/uwgHE4qI6CQQHgCLplvbszAeL7/8Mr788suuXgahm/Pu4WT8ej0f\n",

"1mZcHFo3Ev1cbCCRK/HvnRLsiytEbF4Nc6yjlSkWDPHAkmgv9HOxQaVY1jjmUzNhKa9Kovc69pYm\n",

"jUJUa1hytOpRYoqiaJSJpM0C0bU7liJZ68YdByvTxoihJqYdH0dLOFp1T+NOd+BmThWW7rgBmgZ+\n",

"XhmN8YEuXb0kggG5ll2JZTtuwsaci9i3JpHhFwRCK7RLdFZVVWHixInM5xKJBDk5OSgvL4dSqcSK\n",

"FSuQnZ0NMzMzfP/99xgzZkybF0JEJ6EtKFQUlv94Ezdzq+HnZIVDz8XA1rLRYJJTIca+uCL8FV+k\n",

"Mx97iLcdlkR7YeZAvk5fp0iqQFqJSGfufGa5GCo9fYmWphyEuDdOWAr14KG/i41Rch5bQqGiIKht\n",

"0DHtaEVmQbUEMmXrxh13W3Mds46vRlR6O1qCRwL72029TIlpWy6hsLoBS6K88L+FA7t6SQQDQ1E0\n",

"Yv53DiV1Umx9bAimh5OEAgKhJR5qp/Pzzz/HxYsXceTIEaxatQre3t547733EBsbi/nz5yM3Nxcm\n",

"Jm174SKik9BWqsQyzPn2KoprGzBmgDN+fjK6WWSSQkXhwr0K7IsrxLn0ckZEWppyMDPcHUuivRDp\n",

"Y693t06qUCGjTKSTJ5peKtTrvDbhsDBAa1jS7IgGu/M6bZKNdj0F1brlb22eZVFNg16BrIXDZsHT\n",

"3qJJCdySybP0crAkuzKdzNuH7mL3jQJ42FngxPrR7Z60VS9Toq5BQUZk9jA+OZ6ObRezMTnEFTtW\n",

"RHX1cgiEbstDic7g4GBs2rQJ8+bNg7W1NbKysuDmpm6YHzp0KDZu3IhJkya16VxEdBLaQ4qgDo9s\n",

"vQapgsKzY/zxxozgFo8tF0nxd3wx9sUWIqeynrnd39kKi6O8sGCIxwMDu5UqCjmV9U1K8+q58/qy\n",

"JVkswN/JiinPa8Voa7O6hVIFY9a5vxxeKpS2ujYzLlu9O+mgybBsUgbn2/UN40534HJmBR7feQsA\n",

"sOfpYYjp59TucyzZfh2xedV4c0YwnhrlR1oYeggZZSJM2XwJJhwWbr05CfbEnEgg6KXD2zHXrl1D\n",

"TU0NZs2ahaqqKigUCkZwAoCvry8KCgr03lcmk0Em042/UalUHV0KoQ8SyrfF54si8PzvCdh+KQch\n",

"fB7mDvLQe6yLjTnWjA3As2P8EZdfg72xhfj3TglyKurxyfF0fHbyHiYEuWBJlBfGBTqDq0ekcTls\n",

"DHC1wQBXG8wfrL6NpmkU1TQgRVCHZE2PaIpAiHKRDNkV9ciuqMc/SQLmHGZcNmzMubA248LanAsr\n",

"Uy5kSgoF1RJUP8C4Y2PGhY9To2mnaTncxcasR/Wa9kaEUgVeO3AHAPD4cJ8OCU5APV7xZm41Pvo3\n",

"DVnlYnwwN6xL2zcIbUNb7UgRCHH0jgCPj/Dt6iURCN2SDovOnTt3YsWKFeBy23+KTZs24f3339e5\n",

"bfjw4R1dCqGHkFMhRo1EgUFedp0yQWjWQD7SSoT47nw2XjtwB/5O1gj3tG3xeBaLxWR/vjcnFEeT\n",

"BNgbV4iEglqcTi3D6dQyuNiY4ZFITyyK9IT/AyaMsFgseDmoy9TTwtxBUTRKhVLE5lXj+N1SnEgp\n",

"1TlepqQgE8tRKW5ZYDpamWJ0fyf4OlnpCEt7SxOy69WN+fBIKkrqpPBxtMR/pwd1+Dz/nR6ES5kV\n",

"KKxuwJ+anfltyyNJrFcPYP5gD6QIhPg7oZiITgKhBTpUXheLxXB3d0dsbCyCgtRPsFZWVsjOzm5T\n",

"eV3fTuc777yDLVu2dOQxEHoANE0j8qMzqK6Xw5VnhpnhfMyOcMcgL7uHElMURWP1r3E4m14Od1tz\n",

"/PP8KDjbtC+EO6NMhH2xhTiYUKwTFTTU1wGLo70wI9yN6dFUqCgU1TQ0jxmqVmdayh9g3GkL1mZc\n",

"hLjzNHmi6vJ8PxdrUibvppxNK8NTu+LAYgH7nh2BaN+Hi82Jy6vG4u3XoW3V9XKwwM4nojHA1aYT\n",

"VkswFOUiKYZvPAuKBi68Mg6+TlZdvSQCodvRIdG5c+dO/Pzzz7hy5Qpz25NPPglfX1/GSDRv3jzk\n",

"5eURIxGB4fGdN3E5s1LnNk97C8yO4GP2QD6C3W06JECFUgXmf3cV2RX1iPKxx++rh3eoJClXUjiX\n",

"XoZd1/JxPadK7zEcNqtV4w6Xrd79ZMLRHRv7LD3tdY07UoUK6aUipjyfKqhDWqlIr3A15bIRqCnh\n",

"aSOcgt14vWqCT0+kViLH5M2XUCGS4elRfnh7VkinnPeLU/fwzbks5nNrMy6+fnQQJgS5dsr5CYZh\n",

"xU+3cCmjAi9O7I+XJg/o6uUQCN2ODonOkSNHYvXq1Vi5ciVzW1lZGR5//HHk5ubC1NQU3377LcaP\n",

"H9/mcxLR2fvJLBNh+pbLUFI0/JysUCaUQiJv7OUNcLZSC9AIPgIeUNq+n5wKMeZ+dxUiqRKPDvXC\n",

"xvnhrQrYugaFzvhGZteyuh5lQv3jNpvibGOGwV52OqYdX0cruNua6+0JbSsKFYXsCjFjVkoR1CFV\n",

"INSbqclmAf7O1uoxn03mzjeNkCIYlhf/TMDhRAECnK3w7wujOy0NQKGisHDrNSQV1TG3sVjAW8Rg\n",

"1K05lFCM9XsT4eNoiQuvjCM/JwLhPkg4PMGofHg0FTuv5MLfyQoH18XgSmYljiQJcO5euc4OX4g7\n",

"D7Mj+Jg10B1eDpZtOveFe+VY9UssKBr4cG4opoW5I1+TXclkWGom8NRKFK2ey8acq+6pdLBEqVCK\n",

"2/k1Ol834bAwOcQVi6K8MKa/c6f0qLYERdEorJHoRDilCIQtzqL3tLfQzJxXZ4mG8m3hYmNGXgA7\n",

"mRPJJVizOx5sFvDX2pEY7G3fqefPqRBj5tdX0KBQwZTDhlyl/vtYHOWJj+aFE4NRN0QiVyLqozOQ\n",

"yFX4a+0IRPqQCUUEQlOI6CQYFaFUgQmfX0ClWI43ZwThmTEBANQh7adTy3AkSYDLmZVQNilhD/a2\n",

"w+yBfMwc6A5XXmO0kYqiUVLXoIkaUu9Sbr+Y0+a1OFmbaUrgjaHoWne4nR7jTl2DAv8kCbA/rhB3\n",

"muxAuduaY2GkJxZFesHbsW0CuTMoF0qRfF+EU1FNg95jnazNmDGf2ggnbwdLIkQ7SKVYhqmbL6Gq\n",

"Xo7nxgXgtWkdNw+1xu83C/Dmwbsw5bAxdxAff8UXgaLV/cZblw+Bo3X7+pcJhuflfYn4O74Yjw3z\n",

"xsfzw7t6OQRCt4KIToLR2RdXiNcO3IGVKQfnXxkHF55uRmZNvRwnUkpxJEmAa9n6eyvtLU1QL1Mx\n",

"uz+tMTLAsUkJXJ1n6eNoCSuzjge4pwqE2BdXiEOJxTq7piMDHLE4ygvTwty6JHi9TqJASknjmM8U\n",

"gRDZFWLoa0O1MeMiWLsjyuch1IOHfs7WD9Ue0BegaRprd8fjREopgtxscPj5GJhxDfOzpmkaq3+9\n",

"jTNpZRjgao2XJwfi1f1JEMmU8LRXG4wC3YjBqDtxJbMSy3fehK2FCW69NdFgvxsEQk+EiE6C0aEo\n",

"Ggu2XkNiYS0WDPbAR/PDmjnBtX2WLe3cNcXJ2gzhHjxGWLryzPHK/iRI5CqEuPNwYO2ITp0Q1BSp\n",

"QoXTqWXYF1eIK1mV0P418cy5mDtIPfc9zKPlGCdj0CBXIa1U0yOqKc/fKxXpFexmXDaC3GwQwrdF\n",

"mKY0H+RmQyYXNeFwYjFe/DMRXDYLh5+PQSjfsD/fKrEMU7+6jEqxDCtjfPHYMG88tSsO+VUSWJly\n",

"8PWjgzExmBiMugsqisbIT86iTCjD9scjMTXU7cF3IhD6CER0EoxCrUTeOL6xSoIjdwTIKBO36b4W\n",

"Jhz4OFqCy2EhuVjY7OumHDbGBTpjdgQfE4NdYGnKRXFtA+Z+ewWVYjlmDXTHN48ONngpuahGggO3\n",

"i7A/rgjFtY1iOcSdh8VRnpg32KPVqUTGRKGikFUuZnpEUzWmpXp58yENHDYLAc5WCOPbamKc1B9t\n",

"LfqeYalMKMWUzZdQ16DAS5MG4MVJ/Y1y3fP3yrHy51gAwK+rhiLcwxZr99zGjZxqsFjAG9ODsHq0\n",

"P2mX6CZsPJaGHy7lYFqoG7Y9HtnVyyEQug1EdBI6BZqmUSGSqXsrtW7wJjuWdQ0PNu74O1kxEUPe\n",

"DpbwdVL3VzrrMcHkVIhx9E4J/kkSIKu8UbxamHAwKcQVswe6w8qMiyd/vgWFisZr0wLx3Lh+Bnns\n",

"90NRNK5mV2JvbCFOpZQxO4qmXDamhrphSZQXRgY4drspQhRFI79awpTlk4vVzvmqFqYleTtYMj2i\n",

"2kzRB40T7cnQNI2ndsXhXHo5wj1s8fdzI42anfru4WT8ej0fLjZmOLF+DKzNuPi/f1Lwxy315LeF\n",

"kZ74eH4YKed2A9JKhJi+5TJMOWzEvjWJJEoQCBqI6CS0GRVFQ1Db0LhjWS1BXqX6Y36VBA2K1keZ\n",

"utiY6Zh1rM25eP9IKgBg4/xwLBvm3e410TSNe2UiHE1SC9CCagnzNRtzrs5s9J+ejDJ6zmGtRI5D\n",

"CcXYG1eEtJLGXVoPOwssivLEoigveNhZGHVN7YGmaZQJZU1c8+qPTXdym+JiY8ZEN2kFqae9Ra/Y\n",

"gdP2Ipty2Dj6wiijh7U3yFWY/e0VZJWLMS3UDVuXDwEA/HItDx8eTQVFA9G+9ti6PBJOxGDU5Uz7\n",

"6hLSS0X4eH4YHhvm09XLIRC6BUR0Gonqejk+O5mO/i42WBTlCRvznvPOV6pQYfWvcbiRUwWFquVf\n",

"FzYL4NtZNBnfqDbt+Dqpdy719VX+dCUXHxxNhb2lCc6/Mu6hys80TeNOUR2OJAlw9E4JSoXSZsd8\n",

"PD8MS6O9DRpx1NLakosbzUdaMcxiAaP6OWFJtBcmh7j2mF2qmno5UkuEOmI0p7Ie+p5NeOZchNwX\n",

"4eTvZNWjDEvFtQ2YtvkSRDIlXp8WhLXjArpkHcnFdZj//VUoVDQ+fWQgFkd7AQAuZlTg+d/jIZIq\n",

"4WFngZ1PRiHIjdclaySo+eFSNjYeS0eUjz0OrB3Z1cshELoFRHQaiaY9WdZmXCyO8sKTI32NGrHT\n",

"UcqEUgzbeBaAun/Sy8GCMe34OFjCR1MG97S3bHd2oEJFYebXl5FRJsaKET74YG5Yp6yZomjE5dfg\n",

"SJIAhxOLIWyy42luwsaCIZ6YG8HHYG97cNgssFkw2m6cVKHCieRS7I0t1Jl8ZGdpgnka81Gwe88T\n",

"DPUyJdIZw5I6wimjTKT3jYq5CRtBbroRTgNcu6dhiaZpPL7zFq5kVWKwtx0OrBlp9DctTdl2MRuf\n",

"HE+HpSkHx18cDR9H9bjFrHIxnt4VizyNwWjL0sGYFEIMRl1FaZ0UIz45C5oGLr06vkc81xMIhoaI\n",

"TiNB0zR+vZ6Pb89noUKkDvVmsYBJwa5YGeOLEf6O3boEOefbK7hTVId3ZoXgqVF+nXrua1mVWPbj\n",

"TbBZwNH/jEYIv3MFl1JF4eidEqzfm/jAY5sKUDYL4LBYYLNYYLEANlv9f7bma9qPLBYLbPZ9x2qP\n",

"Y+s5lqW+DovFQlG1BIK65juyWkYGODKZobrXbfJ/tvq8HJ1raL7O1r9e3cfZ9FxtO1a7/mbHNlkP\n",

"m8WCiqKQU1GPVIEQqSVCpJeKHvj9D/ewRbiHLSJ97DEx2KXLqwK/3cjHO4eSYW7CxrEXRsO/ndOy\n",

"OhsVRWPZjhu4mVuNwd522P/sCGbXuFYix9rd8bieUwUWC3h9WhCeHUMMRl3F8h9v4kpWJV6ePAAv\n",

"TDSO6YxA6M70adFJUTRyKsUAWDDhsGDCYcOEw4Yphw0TrvpzrubFtbOQKlTYfSMfWy9k6xg0gtxs\n",

"sCrGD3MG8bvlbs+v1/Pw7uEUhLjzcOzF0Z1+/uf23Maxu6UY6ueAvc8MN8iLZHJxHWZ9c6XTz0sw\n",

"LL6OluoeUY/GXlFj9SwWVEkwbcslSOQqvDsrBKs6+Q1XRymubcC0ry5BJFVi/aT+WD+pcc63QkXh\n",

"vX9SsOem2mC0YIgHNi0I7zGtG72Jv24XYcP+JPg5WeHchrFE/BP6PH1adL596C523yh44HGmHLZa\n",

"lHKbiNImItWEy4Zp08/v+7opV/drphwWFBSNP28VoEbPOMb+LtZYNcoPHnYWzP257JbOZTiB3JSa\n",

"ejmGbjwDhYrGsRc6fzeyuLYBE7+4AKmCwtePDsacCH6nnl/LkSQB/vNHwgOPs7M0wcxwd8wMd4e7\n",

"nQUomgZN06BogKJpqCgatOb/2ttomoaK0t7W+PX2HlspluOv+CIdV74WBytTzB/sARcbM6i096Ma\n",

"z9v4D43npejGY5t+ndJzbLP1duBY7f+p+469fw1NHr+KQotjPfXhyjNjQu21maIedp1rWKIoGkt3\n",

"3MCt3GoM83PAH6uHd6vEAW1eKIfNwv41IzCkyRhObWXlg6OpUFE0In3ssf1xYjAyNvUy9VjMBoUK\n",

"B5/r/FGpBEJPo0+Lzke2XsPt/BpYmHDAYql3CFozyvQE2iOQuZzmYlmfQNbe75Pj6QDUPanvzwlt\n",

"Jra5HJbmeh0TyF+fzcSXpzPgxjPH2Q1jH2piUGt8eiId31/IBqAu56qajOuxMuVApqTaNIbT0NA0\n",

"jcTCWuyLK8SRpBKIZeq+VDYLGBfogsVRnpgQ5NqrZnDXy5SY8+0VZFfUY3R/J2xeMghpJUIkayYs\n",

"pQqEyK3Sb1iytTDR6REN5fPg52Td4f7LnVdy8eHRVFiacnDixTHdsifvxT8TcDhRAB9HS/z7wmhY\n",

"3/c3czmzAs/taTQY/fhEVI/sF+7JrP8zAYcSBZ3as04g9FT6tOic/c0V3C2uw89PRmN8kAsA9Qu9\n",

"kqLVAlRJQ66iNGJU/U+upBv/rxGpCuV9nzPHqj9XMsfTLZ6rql6OW7nVra7X3tIENKC5Ht2mEZDd\n",

"mfsFMk2rd/m0RHjatrqb3JpANrlfUHPZMGGrP+ewWVi75zakCvX3b2a4O/69W8JcN5TPwzA/R8QX\n",

"1CCxsJa5ncUChvk5YHYEH9PD3OFgZbygd4lciX/vlGBfXCFi82qY2x2tTLFgiNp81M+lZ49DpGka\n",

"G/Yl4e+EYrjyzPDvC6P17syJZUqklTROV0oWCJFZJtJ5o6DFwoSDYHcbhDaZsNTf1fqBpebsCjFm\n",

"bLkMmZLCR/PCsHx494y8qWtQYMaWyyiubcDiKE98ujCi2THZFWI8vSsOuZX1sDTl4KslgzCFTMkx\n",

"GhczKvDET7dgb2mCW29NMmq2K4HQ3ejTonPq5ku4VybCnqeHIaafk1Gv3RJ1EgV2XsnBT1fzmJ0t\n",

"LXxbc6wY6Yul0V6wszR9aIGsbCqQtf9XtiyQGxRKHLtbyqxnhL+jzv2VzPFN1tJLBHJreNpbwNHK\n",

"9KEFMrdJa4ZpU7F83w5yUY0EhxKLdX4WABDuYYvHhnljVgS/2Y5XT2BfbCFe++sO2Czgj9XDMczf\n",

"sc33lSlVyCwT60Q4pZWI9GbHmnBY6OdigzDNbmiohy2C3XnM90yporBo+3UkFNRidH8n/LpqaLfu\n",

"xbuRU4VHd9wATQPblg/BtDD3ZsfUSuRY93s8rmapDUavTg3E2rEB3fpx9RaUKgrDN51DpViGH1dE\n",

"kUQBQp+mT4vO8Z9fQG5lPfavGYFoXwejXvtB1NTLseNyDn65lgfJfaMJLUw4WDDEAytjfI2+u/XR\n",

"0VT8eCUX08PcsHV528e7tVUgy1UUHttxkxGp25YPUQtgJdUugazQOf994lpzv8z7eiatTDl6x0D2\n",

"ZJyszdQCl6tH8HZAIHPZLJg2OdeDBHJbWyzSS4WY++1VyJQUXp0aiHXjH356lIqikVsp1ojQxkxR\n",

"fdOxWCzAz9EKIXweLmdWMsdc++8E8LtxeL+W/51Ix9YL2bCzNMHJ9WP0toEoVBTeP5LC9LEvGOyB\n",

"jQvCu6Vxsbfx4dFU7LySi5nh7vjusSFdvRwCocvo06Iz5pNzKK5twKF1MRjkZWfUa7eVKrEMP1zK\n",

"wa7reUw5uCljBjhjZYwvxvZ3NorJQTvezYTDwq03J8HeACXmrHIxpn11CUqK1ml9MATn08uxalcs\n",

"aBpMGVVF0fj9Zj4+/DcNcqX6ez7MzwGvTA2EvaUJFCoaGWUiHEwoxoV7FXrPOyHIBSMD1DFYrQlk\n",

"3XaM+8TzfWK7N+4gm3BYzfqovRwsYMbldEgg6/Qvc5oLZBMOGxUiGe6ViZBZJkJGmRhCqUJvjygA\n",

"uNuaM455bb+ou615t9shlCspLNh6FcnFQozu74RdK4e2+Hzw2/U8vHdEbTAa4m2H7Y9HwdmGGIwM\n",

"iTY5w5SrGYtp0XOGgxAInUmfFp3RH59BhUhmEDd2Z1MukmL7xRzsvpEPmbK50PB3tsLKGD88MsRD\n",

"7+SfzmTm15eRIhDi/TmheGKkr0GusfFYGn64lANfR0ucfGmMQeNetl7Ixv9OpIPLZuH31cMx1E+9\n",

"611TL8dnp+7hj1sFoGm1geqlyQPwxAgfnWk690pFOJIkaD6G04yLKaFumB3hjph+Tgbp5dK3g3w9\n",

"pwp7buTj5n09wjbmXCwY7IGR/ZxA0/QDd5AVFN3m3eSeLJAtTTn4ddVQ1DUo8NSuuAceb29p0izC\n",

"yc/Rqsud7VnlYsz65jKkCuqB8U5XMivx3J7bEEqV4NuaY8cTUQjl2xpxtX0LmqYx9atLyCgT45MF\n",

"4Vg6tP0jfwmE3kCfFp0R759CXYMCZ14ei34uXRv43FbKhFJ8fz4Lf9wq1PsizjPn4tGh3nh8hA88\n",

"7Q3jttWOrhzoaYt/nh9lkGuIpApM+OIiKkQyvDYtEM+Ne/hya0vQNI0X/kzEkSQBHK1M8c9/RunM\n",

"Q08qrMU7h5Nxp6gOgDpT9f05oc16Dmmaxt3ixjGcJU1C3+0tTTA93B2zB/Ix1M/BKBNtxDIljiYJ\n",

"sDeuEAkFtcztzjZmeGSIJxZHeRo16JzWRCw1FaS7b+TjqzOZAIAP54YiwsuuzaK2o+0WTc9VKZah\n",

"RqLAyABHRPs6YMvZTNhamOD0S2NgYcpBqqY0r+0TzSwX66QdaLEy5SDYndc4d96Dh/4uNkZPFvjt\n",

"eh7eOZwCUy4bR54fhUC3lttvcjQGo5zKeliYcPDV0kGYSgxGBkP75naYnwP2Pjuiq5dDIHQJfVp0\n",

"Br9zAg0KFS6/Nh5eDt0vDqU1BLUN+O58FvbFFeqNeWKzgGlhblgZ44coH/tOLQdWiWUYtvEslBSN\n",

"Uy+NwQBXw/SVaoOVLU05OLdhHNxsDRdX1CBXYeG2a0gRCBHK5+HAmpGwMG3cXVVRNPbGFuLTk+mo\n",

"1WSrzh/sgTdmBMHFpvm6KIrG7QL1GM5jd0t0XPmuPDPMDOdjdoQ7BnnZGaVUm1kmwr64QvwdX6wz\n",

"lGCorwMWR3thRribwXfI7yetRIh536n7OA39xqIl8qvqMWXzJZ3qwZalgzB3kIfe46UKFTLKRDo9\n",

"oumlQr2tL6YcNvq7WjeZOc9DsDvPoN9nmqax6pdYnL9XgSA3Gxx+PqbVKkGdRIF1v8fjSlYlALXB\n",

"6LlxxGBkCAS1DYj53znQNHDl9fEG2xQgELozfVp0Brx5DCqKxo03JhpU0BiSwmoJvjufhf23i/Tu\n",

"wABAmAcPq2L8MHOge6eVqZ/5NQ6nUsvw7Bh/vDEjuFPOeT8URWPhtmuIL6jF3EF8bFk62CDX0VJc\n",

"24A531xBVb0csyP4+HrpoGYvvjX1cnx68h7+jFWX3G00JfcV95Xcm6JUUbiRU40jSQIcTy7RmQPv\n",

"aW+BWQPVAjTEnWfwF3u5ksK59DLsjS3ExYwKaH9lrM24mB3hjsVRXkYRwmKZEnO+uYKcynqMC3TG\n",

"T09Ed1l5esuZTGw+kwFA3bv7ZzsnYilVFHIq65EiqGNmzqcIhBBJlc2OZbEAfycrpiyvzRS1s+y8\n",

"3ugKkQzTvrqEqno5Vo/2w1szQx64/g+PpmLX9XwAwLxBfHzyyEBiMDIAj/5wA9dzqjrNLEcg9DT6\n",

"rOhUUTQC3jwGAIh/Z7JRMxcNQX5VPb45l4W/44vQgvaEs40Zlg/zwWPDvR96MsnJlFI8+9ttONuY\n",

"4fp/J7QouB6W5OI6zP72Cmga2PfsCKbf0lDcyq3Gsh03oKRovD4tCGvHBeg9LrGwFu/eV3L/YG7Y\n",

"A9cnV1K4nFmBI0kCnEot00km8He2wuyBfMyO4Bul3aOkrgF/xxdjX1wh8qsae1EHuFpjcZQX5g/2\n",

"gKMBJtjQNI31exNxOFEAN545jr04ukv//rT9wwAwLtAZv6wc+tDnpGkaRTUNSBHUMcH2KQIhykX6\n",

"py552Fk0luY1YtSVZ9Zh8X8mtQxP/6ruT21rJNxvN/Lx3j8pUFE0BnvbYfvjkXp38QkdZ19cIV47\n",

"cAcBzlY48zIZi0noe/RZ0SlVqBD0zgkAQPL7U3tkrqE+cirE+OZcFg4lFrfoyDXlsDFnEB8rY3w7\n",

"bB6QKykM33QW1fVy/LwyGuMDDecwf+Pvu/jjVgGC3Xk4+p9RBu+H3HMzH28dTAaLBfz0RMvueX0l\n",

"9wWDPfDfFkru99MgV+H8vXIcSRLgbHo545QHgGB3HmZHqHtADd36QVE0buZWY19cIY7dLWFKzSYc\n",

"FiYFu2JxtBfG9HfutO/7H7cK8Mbfd8Fhs/DnM8O7NK4svqAGC7de03mjZsjc3nKRFCkCIVKblOeb\n",

"ms+a4mhlihCdCUu28HGwbPOO8JsH7+L3mwVw45njxPrRbdpNvZpVief2xKOuQQG+rTl+WBGFMA9i\n",

"MOosRFIFoj46A5mSwj/Px2Cgp11XL4lAMCp9VnTWNSgQ8f4pAEDGR9N71ShBAMgqF2HL2SwcvSNg\n",

"xCeLpS6jNi37DfNzwKpRfpgU7NpuUfHePyn45VoeZg50x3fLDJc9VyWWYfznFyCUKvHhvDA8boTp\n",

"MNoXbBszLg49H4OAVgw31fVyfHYyHX/GFra55H4/IqkCZ9LKcCSpBJcyKnSm6wzyssPsCD5mGWEM\n",

"Z12DAv8kCbA/rpDZxQXU0UELIz2xKNLrocZBpgqEmPf9VciVVKs7ycZAqlBhxteXkVNRj3mD+LC1\n",

"MMGu6/nwcbTEyfVjjFZermtQaAxL6jGfyYI6ZJWL9VYsrM24CHHnIaRJhFM/F2u9yQgSuRKzvla3\n",

"MMwMd8e3ywa3aWctt7IeT+2KRU6F2mC0eUmE3sB5Qsf4zx8JOJIkwJMjffHenNCuXg6BYFT6rOis\n",

"EMkQ/fEZAEDuphm9tsxxr1SELWczmOk1bBbg7WAJG3MTpJYImT5QLwcLPDHCF4ujvcAzb1uGHJM9\n",

"x9Fkz1kaLntu17U8/N8/KbCzNMH5DeMMkg/aFLmSwmM/3kBsXg38naxwcF3MA7P19JXcP5wX1u6d\n",

"vJp6OU6mlOLIHQGuZ1cx4oPFUht/1GM43QxS+m5KqkCIfXGFOJRYzOzkAupJVEuivTAtzK1dwqxp\n",

"H+f4QGfs7MI+TqAxsNvFxgynXxoLNhuY/OUllAqlWDc+AK9ODeqytUkVKqSXipjyfKqgDmmlIp3d\n",

"cC2mXDYCXW0Q5sFDiKY8H+zGg4UpB3eKarHg+2tQUjS+WBSBRyI923T9ugYFnv89Hpcz1QajV6YM\n",

"wLrx/Xrt86QxOZ9ejpW/xMLRyhQ33pxIxmIS+hR9VnQKahsw8pNzMOWwkfHxdKNdt6tIFQjx1ZkM\n",

"nEotAwBw2CyMDHCErYUJrmRVMqLCypSDRVFeeGKkL/ycrFo9J03TmL7lMtJLRQafT61UUZj1zRWk\n",

"l4rw2DBvfDw/3GDX0lIhkmHut1cgqJNifKAzfnwi+oG7wSqKxp+xBfj0xD1mqs2CIR54Y3pwhwK4\n",

"y0VSHL9biiNJAsTlN85c57BZiOnnhNkD3TEl1M2gYdMypQqnU9XmoytZlczOOc+ci7mD1HPfH1SC\n",

"pWkaL/6ZiH+SBHC3Nce/L3RtH+et3Gos+eE6aBo6AwhOJJdize7b4LJZ+PeF0a1GDhkbhYpCdoUY\n",

"KcWNEU6pAiFEsuaGJTYLCHC2RiifhwsZFczfd3uSOpQqCh/9m4ZfruUBAOYO4uN/xGD00ChUFIZv\n",

"PIuqernBh18QCN2NPis68yrrMe7zC7A24yL5/alGu25Xc7eoDl+dycDZ9HIAAJfNwqyB7vC0t8TJ\n",

"lFJmNCSLBUwIdMHKGD/E9HNscYfjx8s5+OjfNAzyssOhdTEGXfuNnCos/eEGWCzgyPOjjNJrllxc\n",

"h0e2XoNMSeG5cQF4bVrbdr/0ldxfnjIAjw9ve8n9foprG/DvHQGOJJXgbnFj6duUw8bYQGfMjuBj\n",

"UrCLQSN5imokOHC7CPvjilBc28DcHuLOw+IoT8wb7KG3d/D3mwV486C6j3PvM8MR1YV9nPUyJaZv\n",

"uYyCagkWR3ni04UROl/XJjMM8bbDgTUjuzz0vTUoikZhjUQnwilFUKcT0XU/k4JdEeGpjnEK49vC\n",

"5QEtG3tu5uP/DqdASdGI8LLDjscjH3gfQutoW5NmR/DxzaOGTeUgELoTfVZ0ZpSJMGXzJThYmSL+\n",

"nclGu253IaGgBpvPZOJShnqMowmHxcTlHE8uxTmNKAXUbuaVMX6YP9ij2S5HhUiG4ZvOQkXRRgnZ\n",

"1/ZDRfnYY/+aEUYp9x1OLMaLfyYCAL55dDBmR/DbfN+Eghq8eziFEYkdLbnfT25lPY5qpiA1nSFv\n",

"YcLBxGAXzI7gY+wAZ4PtSlEUjavZldgbW4hTKWXMoAJTLhtTQ92wJMoLIwMcwWazdPo4/zs9CGvG\n",

"dl0fJwC8fegudt8oAN/WHCdeGtOsnaSkrgGTv7wEscx4PcSdCU3TKBfJdCKcTqaUtXi8k7WZzpjP\n",

"UD4P3g6WOn9b17IrsXa32mDkbmuOHcRg9FDcKarFnG+vwozLRtzbk2DTxpYmAqGn02dFp7Yf0ZVn\n",

"hptvTjLadbsbcXnV2HwmA1ezqgCod82WDfPGtDA3HL9bgv23i5hYH3tLEzw61BsrRvjq5Jo+9Uss\n",

"zqaXY+24ALzexp3AjlJS14AJn19Eg0KFr5YMwrzB+kO8O5tPjqdj28VsmJuwcWDNyHa94KooGn/c\n",

"KsBnJzun5H4/2jGcR+4IdKKPjDGGEwBqJXIcSijG3rgipJUImds97CwwI9wNu67nQ66kMCHIBT+u\n",

"iOrSncMrmZVYvvMmAGD3U8Mwqr9+l7q2h9jGjIszG8Ya3MBlDLSTxAB1ViiHzUJ2hX7Dko0ZV2NW\n",

"aoxw4rBZePa3OGRX1MPchI3NiwdhejgxGHUEmqYx6cuLyK6ox6cLB2JxlFdXL4lAMArtFp0ymQwb\n",

"NmzAyZMnYW5ujoiICOzevRsnTpzA22+/DblcDktLS2zfvh0REREPPqEGY4vO+IIaLPj+GrwcLHD5\n",

"tQlGu2535UZOFb48nYFbmnndZlw2lg/3wWPDvHEuvRy/XMtDUY26nMplszA93B2rYnwx2Nsex++W\n",

"YO2eeLjxzHH1vxMMHmn03fksfHbyHlxszHDulXFGibtSUTSe2hWLC/cq4GFngcPPx7Q767S6Xo5P\n",

"T6hL7oD6hX3DlAFY/hAl96Z09RhOmqaRXNxoPro/HP3DeWFYHOXZaQMK2otQqsC0zZcgqJPi8eE+\n",

"+HBeWIvHqigaj2y9hsTCWkwPc8PW5ZFGXKlhoGkaz/+RgH/vlMDPyQr/vjAKLLCQVqrpEdWU5++V\n",

"ivSO2DXjsuFhZ4GcynrmtnXjA/DKlEBiMOoA2uexkQGO+H318K5eDoFgFNotOl966SUolUp8/fXX\n",

"YLFYKC0thZmZGfr164dLly4hNDQUly9fxtq1a5GcnNzm8xpbdGr7AwOcrXB2wzijXbc7Q9M0rmdX\n",

"4YvTGbitMa2Ym7DxxAhfPDXaD/H5tfj5ai5uaoQpoI7zWT7cB+/9kwKxTIlfVw3FmAHOBl2nTKnC\n",

"lM2XkF8lwbNj/fHGdMNMRLqfugYF5n93FTmV9Rjq64DdTw/rUNRWfEEN3j2cjORi9a5gkJsNPpoX\n",

"1ql9jq2N4XSxMcPMge6YHcHHYANNH5IqVFix8xZu5VXr3G5naYJ5GvNRsDuv06/bGq8dSMK+uCJ4\n",

"O1ji+IujYdXkzQpN08iuqEdcXjXyqiR4YqQPaiUKzPrmClQUjR0rojA5xNWo6zUEdRIFpm25hJI6\n",

"KR4d6o1NC5ob8hQqCpllYibQXhvnVN9kkMH9zAh3wxBve4R52CKEz2tzAkZfprBagtGfngeLBVz7\n",

"7wS421p09ZIIBIPTLtFZX18Pd3d3FBUVgcdrfMGIi4vDsmXLkJGRwdzG4/Fw4cIFDBnStvxGY4vO\n",

"SxkVWPHTLQS783D8xdFGu25PgKZpXM6sxJenM5BYWAsAsDTl4MmRvlg92h+Cugb8fDUP/yQKmu2I\n",

"jO7vhN+eGmbwNZ5NK8NTu+JgwmHhxPoxreZodiZZ5WLM/+4qRDIllg/3xkfzOuai11dyf2SIJ/47\n",

"PahTSu5N6YoxnCmCOsz//po6emqYNxysTLE/rgilwsbd14Getlgc5YXZEXyDuu8B4Fx6GVb9EgcW\n",

"C9j7zAhEeNkiubgOcXk1iM2rwe38atQ0iYV6efIAvDCxP9NW4W5rjtMvj+0VQySuZVXisZ03QdNo\n",

"s5imKBr51RKdCUvaOCV9eDtYMmV5baYomW7UnMXbr+NWbnWXZ9YSCMaiXaLzzp07mDNnDpYuXYoz\n",

"Z87AwsIC7733HqKiouDv748jR45g5MiR+OeffzB37lz89ddfWLBgQbPzyGQyyGS64+DeeecdbNmy\n",

"5eEfURvRjomL8LLDYQO7rnsqNE3jwr0KfHk6gzHCWJtxsSrGF0+N9odcSeH3mwX47UY+KsWNP8+Z\n",

"A93x4sT+GOBquLgZmqax8hd1uXvsAGf8sjLaaCW+c+lqwUvTwMfzw/DYsI4bTarEMnx64h72xmlK\n",

"7uZcbJjceSX3+2k6hvN0apnO7lVnjeEUSRWY/c0V5FVJMDHIBTs0fZwqisalzArsiy3EmbQyKFTq\n",

"px4zLhszwtVz34f7O3T6z7FWIsewjWeZSUvRvvZIKqrTm3nJYgHzBnngvdmhsLU0QYNchSlfXURh\n",

"dQNWxvji/2b3jjBv7ehPBytTnFg/ukOCkKZpHE4UYP3exDYd72JjxkxWCvNQf/S0t+jTpfk/bxXg\n",

"v3/fxQBXa5xcP6ZPfy8IfYN2ic74+HhERkZi165dWLFiBRISEjB58mSkpKQgNTUV7733HsRiMUaM\n",

"GIHz589j06ZNmDNnTrPzvPfee3j//fd1bhs+fDiuX7/+8I+ojWj7EKN97bF/zUijXbcnQtM0zqSV\n",

"48vTGYxRxMaci9Wj/bEyxhemXDaOJpVgw/4knfuN6ueElTG+GB/oYhDzSE6FGFO/ugSFisaPK6Iw\n",

"yYjlT20/FpfNwu+rhz/0TPj7S+7B7jx8ODfUoNFChhjDSdM0/vNHAo7eKQFfk8epL8i/SizDwQT1\n",

"3PeMskb3vY+jJRZHeeGRIZ46ZrX2QNM0CqsbEJdfjdi8Gvxxq6BN95sU7IpXpg5AkJtu2V9bFWGx\n",

"gEPPxSDCy65D6+pOyJQqzP32KtJLRRgf6Iyfnuz4m7b8qno8tSsOWeVimJuw8c6sEPg6WulEOOVU\n",

"1usdy8sz5zJmJW2Ek7+ztcH7wrsLdQ0KRH98BnIlhaP/MU4MHIHQlbRLdFZWVsLV1RVyuRwcjtoM\n",

"EB0djU2bNmHSpEYHuEwmg5ubG2JjY9GvX79m5+kOO53aGJyYfo7Y8zRp4m4LFEXjVGopNp/OxL0y\n",

"EQDA1sIEz4zxxxMjfbH7Rj4+OZ4OQB1OrXXF+jlZ4cmRvngk0rPTy5Pa8qe3gyVOvWS80YVNxZWj\n",

"lSn++c8oeNg9XE+WiqLx+60CfHYinSmBL4xUl9zba1pqL20Zwzkz3P2BQnD3jXy8fSgZXDYLe58d\n",

"gUgf+1aPp2kaiYW12BdXiCNJJRBrgs7ZLGDsAGcsifbChCDXVntnlSoKaSUixOZVIy6/GnF5NSgX\n",

"yfQeOzPcHYmFtToZo8P8HPDatKBW17r+zwQcShQgxJ2Hf56PMcgutLHJKBNh1jdXIFdS+HBuKB4f\n",

"4dvhcwmlCrzwRwIu3FNHsL00aQBemNg4wahepkS6xrCkFaMZZSJmt7sp5iZsBLnpRjgNcLXptaH0\n",

"6/bE49+7JXh6lB/enhXS1cshEAxKu41EU6ZMwfr16zFjxgzk5uYiOjoaSUlJYLPZcHdXx2e8/fbb\n",

"SEtLw19//dXm8xq7p3NfXCFeO3AH4wOd8fPKoUa7bm+AomgcSy7BV2cykaXJiHSwMsX8wR7YeSUX\n",

"gDqO5lJmBf64VcC4mG3MuFgSrZ521J7ds9aolykx4YsLKBPK8MqUAXh+Qv9OOW9bkMiVWLj1OlJL\n",

"hAjz4GH/syNhYfrwL4z6Su6vTAnEY8O8jSJ2aiVynEhu/xjO5OI6LNiq7uN8a0YwVo/xb9d1JXIl\n",

"jt0txb7YQh0DkqOVKRYMUZuP+rnYQCxTIqGgsRczoaCWifXSYsJhwcPOAnmaCKkFgz0Qwufh+wvZ\n",

"qK5Xm6rCPHh4dWoQxvR3euAuX6VYhklfXkStRIE3ZwThmTG9o//u56u5eP9IKsy4bPz7wij0c+l4\n",

"S4yKorHxWBrzHDBzoDs+XxjR4t+EXEkho0zEGJVSBEKklgib/SwBdWJGPxdrnQinYHebXpFveTq1\n",

"DKt/jYOzjRmu/3dCr3hDQyC0RLtFZ05ODp566ilUVlaCzWbj3XffxSOPPILVq1fj8uXLUCqVGDFi\n",

"BL755hvY2dm1+bzGFp3aHZmpoa7Y/niU0a7bm1BRNI4kCbDlbCZym8SoAMDq0X54a2YI6mVK/B1f\n",

"hJ+v5SGnQn0MmwVMDnHFyhg/DPN7+B4+7a61hQkHZzeMBf8hdxzbQ1GNBHO+vYrqejnmRPCxZemg\n",

"TuvLup2vLrmnCNQl9xB3Hj6cF4pIH+NN82nrGE42C5j1zRXkV0kwKVjdx/kw34ecCjH2xRXhr/gi\n",

"VLSwa9kUnjkXkT72iPJ1QLSvAwZ62uKlvYk4nlwKAHCyNmUc/P5OVtgwJRDTw9za1fahfaNqbsLG\n",

"6ZfGdtobp66Eomg88fMtXM6sRCifh4PPxXQokaEpf94qwNuHkqGkaAz0tMUPj0e1uVVCRdHIq6rX\n",

"iXBKEdTpmLya4utoqRaiHo2ZooauCnQ2ciWFYRvPoEaiwK5VQzHWwOkfBEJX0mfD4bVBybMGuuPb\n",

"ZW1z2BP0o1RROJQowNdnM1FQ3RhO/u6sECwb5g1zEw4oisbFzAr8fDWPmYIEqIXUyhhfzI7gd7h8\n",

"RtM0Fm+/jti8mi75ed7IqcLyH29CSdF4Y3oQnu3EiTtdWXK/n9bGcGpTDOwtTXD+lXF6R2G2BYqi\n",

"kVEuUu9i5lXjRk61juP9fuYP9sCasQHo72KtIyCbTpHS4m5rjhcn9sfCSM8O7SbRNI1Hd9zAjZxq\n",

"o5vXDEmZUIppX11CjUSBNWMD8N/pDz/g4UZOFdbuvo0aiQKuPDPsWBGFgZ52HToXTdMQ1EmbiFC1\n",

"EG2aQ9sUN545M2EpVFOe97Dr3oaldw8n49fr+Zg3iI+vlpKxmITeS58VndsvZmPT8XQsGOKBLxcP\n",

"Mtp1ezMKFYU/bhXg3cMpzG1uPHOsm9BPJxQ8q1yEn6/m4a/4IkgVarHiZG2KZcN8sHy4d4ectCmC\n",

"Osz+5gooGvhj9XCMCHDsnAfVRn67kY93DiWDxQJ+fjIa4wJdOvX8VWIZ/nciHfviigCod/ZemRqI\n",

"x4b5dInpoqUxnAAwS5MB2pYxnFKFComFtbidX4PYvGrczq9pFirPZgEhfB58HK1QWC1Bdrm4met+\n",

"cZQXFgzxgLO1Gf6KL8YrTUxt9pYmWDe+H5YP93novsDsCjGmf3UZchWFrx8djDntGInanTmRXIo1\n",

"u2+DxVL//Qz3f/i/n4IqCZ7aFYvMcjHMuGx8viiiXSNkH0SVWIbUEiET4ZQqEOoE1zfFztKEcc5r\n",

"BamfU/cxLCUU1GD+99dgYcJB3NuTdDJkCYTeRJ8Vnd+czcQXpzPw6FAvbFow0GjX7Qu8uj8J+28X\n",

"6dzmYWeB5yf0w8JIT2YcY61Ejj9uFeLX63nMroUJh4XZA/lYGeOHcM/2OTm1M7WD3Gxw9D+jjNob\n",

"RdM03jyYjD9uFcDGnIvD62Lgb4Ds0Nv5NXjnUDJSS7qu5N4U7ThZfegbw1kpliFO04sZm1eDFEFd\n",

"MzOJpSkHQ7ztEeVrjygfBwzyttMxoNE0jdv5NdgbW4ijd0rQoGg5tHzd+ACsGRvQqb1/X5/NxJen\n",

"M+BkbYozL4/t8K5ud+P1A3ewN64QfFtzHF8/plOyU0Uag9F5jcHoxYn98eLE/gYbhSqWKZFWoi7N\n",

"J2t2RTPLRDrGOC0WJhwEu9voRDj1d7XukolZNE1jwhcXkVtZjy8WReCRSE+jr4FAMAZ9VnR+ceoe\n",

"vjmXhSdG+OD9uS2PwyO0H+2IUQ6bhQ1TBuCXq3mMm9jLwQL/mdAfCwZ7MKJQoaJwMqUUP1/NYyYh\n",

"Aeo8xVUxfpgc4tomAVlTL8f4Ly6gVqLAe7ND8GSMn2EeYAvIlRSW7biBuPwaBDhb4eC6GINMZlFR\n",

"NH6/mY/PTt5jSu6LIj3xupFL7kJNHqe6j9MVPzweiWSB/jGcreHKM0OUrwOifOwR7euAIDebNr9h\n",

"EMuU+PJUBn66mtvsaxFedti8OKLTxb9cSWHG15eRVS7G0mgvfPJI73jTWi9TYsbXl5FfJcHcQXxs\n",

"6aQyr4qi8cnxNOy4rDEYhbvj80UtG4w6G5lShcwysU6EU1qJSO+bFRMOC/1dbHTK88HuPKMMBdC+\n",

"mTHWgA0CoSvos6Jz07E0bL+UQ2IqDABN05j45UXkVNTj04UDMSeCj99vFuD7C9lMiLyvoyVenNQf\n",

"cyI8dEpcSYXqUZtH75QwuxMedhZ4YqQPlkR5w9aydRGnLXPzzLk4/8q4Zg5rQ1MhkmHOt1dQUifF\n",

"BE0wuqFKeJViGf53PJ3ZVeaZc/Hq1EAsM0LJnaZprPs9HsfulsLDzgL/vjAKlqZc3C2uw+38atzK\n",

"rcGZtLJWz7FihA9Wj/bvUEA4RdFYs/s2TqW2fg1A7bhfFOWJmQPdYWnaOeIhNq8ai7apc4X3PjMc\n",

"wzqhHN0diC+owaJt16GiaGxZOghzB3l02rn3xRbirUN3oVDRCPewxY4VbTcYdTYqikZupZjpEdUK\n",

"Uu10sKawWICfoxVCmkQ4hfJt4aAnf/ZhKKiSYMxn58FmAdffmAhXHpngROh99FnR+f6RFPx8NQ/P\n",

"jQvAa9MevnGeoIs2PH2onwP2PTsCgDqMfPeNfGy92Bhb4+9shfWTBmBmuLuOUCoTSrH7Rj723Cxg\n",

"jrUw4WBhpCeejPFtceyliqIx+5srSC0RdlnrxN2iOizcdg0yJYV14wPw6lTD/n7dX3IP5fPwwdyw\n",

"B2ZkPgy/Xs9jendj+jlCoaKRVFjLTP3RYsZlI8zDFkoVhZI6abP8TA87C8yOaN8YznKRFEM/Ptvi\n",

"18M9bLFmbAAO3C7ExYwKJvLJ2oyL2RHqyUeDOmHm/Bt/38Uftwrg72yF4y+O7pKyrCH46kwGvjqT\n",

"CRtzLo6/OBqe9p3n0r+ZU4W1e+JRXS+Hi43aYNRdwvZpmkZxbQOSi4VI1UQ4JQvqUCbUn57AtzVH\n",

"SJMIp1A+D+625g/1e7Vw6zXE5df0qlguAqEpfVZ0vnXwLvbcLMD6Sf2xftIAo123r1BS14CRn5wD\n",

"TQOXXh0Pb8fGF656mRK/Xs/H9kvZqNVEoQxwtcb6SQMwLVQ3xkaqUOGfRAF+upqL9FIRc/u4QGes\n",

"ivHDaD0Zi9pdKBYLOLwupsOu2YehqXv6m0cHd6qBQh8qisYeTclda8RZHOWJ16cFdcpuL03TKKpR\n",

"T/n55Woekorq9B7nYGWKSB97RPuq44vC+LY6ETxyJYUrWRU4klSCUymlLYzhdNebF1nXoMCOSzn4\n",

"9nxWq2tdPtwbb84IhqUpF6V1UvwVX4R9cYXIr2pMVhjgao3FUV6YP9ijw9+fOokCE7+8iEqxrFc9\n",

"jyhVFBZtv46EgloM9XPAH6uHd+rOeWG12mCUUaY2GH22KKJbG7IqxTJmN1SbKZrX5HepKfaWJs0i\n",

"nPwcrdrcw7rnZj7eOpiMIDcbnFg/pjMfBoHQLeizolNrdnltWiCeG9d8ahLh4Xl8501czqzEixP7\n",

"46XJzV+QRVIFdl3Lww+XcpjexCA3G7w0eQCmhLjqiEmapnE9pwo/XcnD2fQyZqRePxdrPDnSFwuG\n",

"eOiUTrUTZAZ72+GvNSMNZlxoDW0Lh7kJG3+tHYlQvuFH3HVWyV2popBeqp3yU4O4vGq9Oz5+TlZM\n",

"L2akrz38nazavNMjVahwLl09hvNcernOLmnTMZxO1mbYdT0PWy9k65Q/tfFYaSVCTN9yWefcDlam\n",

"WDnSFytG+MLW0gQUReNmbjX2xRXi2N0S5lomHBYmBbticbQXxvR3bre4OnpHgOd/T4Aph41jL45+\n",

"qJn13Yn8qnrM2HIZ9XIVXp8WhLXjOnfXTSRV4MU/E3EuvRwA8MKEflg/aUCX/J12BKFUgTQmvkkt\n",

"RDPLxVDpMSxZmXIQ7K4b4dTfxUZvHmqdRDMWU0Xh+IujEezOa3YMgdCT6bOi88U/E3A4UYC3Zwbj\n",

"6dHtm5xCaBva3T5PewtcenV8iy8odQ0K/HQlFz9dyYVIMwYxlM/Dy5MHYEKQSzMRk19Vj1+u5WF/\n",

"XBEzNtHWwgRLh3phxQhfeNhZoLROiglfXIBEruoyN6iKorHql1hczKiAh50F/nk+xmg9prfzq/HO\n",

"oRSm5B7moS65D/HWX3KvlymRUFDLxBYlFNTo7EIC6qkwTV3A5zaM7TSTTmtjOPWhFUIUpc7OvJlb\n",

"jUFedlgY6YkfLuUwebHWZlw8NtwbT43yY6K46hoUOJIkwL64QtxpsmPrbmuOhZGeWBTppbMz3xo0\n",

"rf4Zn79XgaF+Dvhz9fAeI5wehDYM34TDwsHnYjp9LriKovG/E+n44VIOAGB6mBu+WBzRaX23xkaq\n",

"UCGjTMREOKUIhEgrETZrOQHU2bYD3KwR6t64KxrsbgNLUy7W/HYbJ1JK8ewYf7wxI7gLHgmBYDj6\n",

"rOh8bs9tHLtbig/mhmLFQ8wcJrRMg1yF6I/PQCxT4s9nHpz9VyuR48fLufj5ai4jeCI8bfHS5AEY\n",

"O8C5mfgUSRXYH1eEXdfzmNIph83CtFA3rBrli1u5NfjfiXQ4WZvh/Ctju2RkXp1EgXnfX0VuZT2G\n",

"+jlgz9PDmMgoQ6NUUdhzswCfn2pecleoaGZOeVx+NdJKRM12aWw0U36ifR0Q6WOPxMJafHI8HSYc\n",

"FvavGYlBBurFq66X4/nf43Etu0rv120tTHBuw1g4WpsxQx4sTTk48eIYeDtaQqmi8O/dEnx/Phv3\n",

"ytQtGaZcNpZEeeGZMf46k4TSSoTYG1uIQ4nFTKsHAIzwd8SSaC9MC3N7YLZnYbUEUzZfQoNChf89\n",

"Eo4l0d6d8F3oemiaxtrd8TiRUooAZysc/c9ogzjO98cV4s2DaoNRKJ+HH5+Igrut8aaKGRKlikJO\n",

"Zb1ahBare0RTBMJmWbSA2rDk72SF4toGJr/49tuTjG6GJBAMSZ8VnU/visWZtHJ8siAcS4f2jheJ\n",

"7sh//7qDP2MLsTDSE58vimjTfarr5fjhUg52XctjYk2GeNvh5cmBiOnn2Ex8qiga59LL8fPVXB2h\n",

"EuRmw/SBasdydgVZ5SLM++4axDIlVozwwQdGjugqF0nx9K44nV09fXjYWSDa1x6Rvg6I9rXHABcb\n",

"ZtfuTlEtFm69DrmKwruzQrBqVOfHUdE0jfP3yvHZyQykaXZoW4LDZsHd1hxFNQ0AgI/mhWH5cB+d\n",

"YyjN78V3F7KQUFDL3G9uBB9rxwWgv2tj36hMqcLp1DLsjS3ElaxKpn3DxpyLuYP4WBLljTCPlo1O\n",

"P17OwUf/poFnzsXZDePgbNM7hEJNvRxTv7qEcpHMoL+7sXnVePa326iul8PZxgw/PB6JwS3syvd0\n",

"tP3RTSOckgXCFse9ethZ6ATbh3nYwpVn1q0nLBEILdFnRae23/DLxRFYMIQE8RqKuLxqLNx2HZam\n",

"HMS+1b5JG5ViGbZfzMav1/OZEtVQPwe8PHlAi7umaSVC/HI1DwcTiyG/r6y179kRGOrXNSHqZ1LL\n",

"sPq3ONA0sGlBOB414BsdqUKFpMJaphfzdn4N0zN7PxGetnh6tD+ifO1b3F2qa1Bg1jeXUVjdgCkh\n",

"rtj+eGSnv+DF5lXj0xPpiM1T57TamHHx7Fh/hPB5WLs7HjIlhaF+DpgY5IJ/75Y0E9CTgl0xZxAf\n",

"k4JdmpVnaZrGjZxqfH8hC5czK5nbp4S4Yt34fs3c00U1Ehy4XYT9cUUorm1gbg9252FJlCfmDfZo\n",

"FgivVFGY9/1VJBcLMSeCj68f7T2jDC9lVGDFT7cAqKdtjQ/q3GlbWgqrJXh6VxzulYlgymXjs4UD\n",

"OzWyqbtTLpIyM+c/P5XR6rGOVqbNIpx8HCx7TWsHoffSZ0Xnku3XcTO3Gt8uG4xZA7uvc7KnQ9M0\n",

"xn9+AXlVkg73VpYLpdh6MRt7bhYwQnJkgCNemjwA0b76RWSVWIY/bhXg1+v5OjE9iyI9sWqUX5c0\n",

"6GtjpEw4LPyxejiiWlh7e6kSyxCXX8OMkkwu1j/lZ7C3HQZ72SO9VIRz6WVMlNCSKC+8Ni1Qbxmv\n",

"aYnV094C//5n9AOzUttDiqAOn5+8x0ysMeOy8eRIX6wZG4CCagmW7biBerkKk4JdsXX5EKY1QbuD\n",

"fj8WJhxMDHZpcQznnaJafH8+GydTS5ndzFH9nPDcuACMCNDdRacoGteyq7A3rhAnk0uZ+fKmXDam\n",

"hrphSZQXRgY4Mi/0d4vqMPc79SjWX1Z2/ijUrkQbMedkbYoT68cYbAiBWKbE+j8TcCZNbTB6fnw/\n",

"vDy55xiMOovb+dV4ZKs6B/bnJ6ORXSFGqibCKatcDH0tz9ZmXIS483TEaD8Xa6O18xAIbaHPis4F\n",

"319FfEEttj8eiamhbka7bl9EO3J0ZIAjfl89vMPnKa2T4vsLWfjjVgEjqkb3d8JLkwe0aJCRKyls\n",

"vZCNzWd0dw5G+Dti1Sg/TAhyMdr8ZZqm8fzvCfj3bgmcrM3wz/Mx4Nu1r3eNpmnkVtYzu5hx+TXI\n",

"qWg+b9rFxowZIxnt64Bgd90pPxUiGT45no6/4tUud1sLE7wyNRDLhnrrfD9+uZqL946kwoTDwoE1\n",

"IzstUzGvsh5fnM7AkSQBAHXZe0m0F16Y0B9utubIKBNh8fbrqJUoMMLfET+vjGYE5L1SEWZ/cwVy\n",

"FYVPFw5EhKcdjt5Rz4FvGoukbwynlqxyEbZeyMGhxGKml3WQlx3Wje+HiUEuzUROrUSOQwnF2BtX\n",

"pFP697CzwKIoTyyK8oKHnQU+PJqKnVdy4WlvgVMvjemxppj7kSpUmPPtFWSUiTEpWD30wFDlXRVF\n",

"49OT6dh+UW0wmhbqhi+X9FyDUUegaRrjPr+A/CpJs5B+qUKF9FIRU55PFdQhrVTUrLIDqN8gBbmp\n",

"JyxpM0WD3XhGmwZFINxPnxWds765jORiIX5eGY3xvWhHojtSVCPBqP+dBwBceX38Q4dNF9c24Lvz\n",

"WdgXW8i4nMcHOuOlyQNazOT87GQ6vjuf3ex2bwdLPDnSF4uiPI1iNJLIlXhk63WklQgR7mGL/WtG\n",

"tGpUkSsppAjqEJdXwzjLqzRh+U0Z4GqNSB91L2aUjwO8HNo25ScurxrvHE5hhFSYBw8fzg3DYG97\n",

"JBXWYuG2a1CoaPzf7BCs7ISxomVCKbaczdT52c2O4OPlyQPg52QFQD2ZZeG2aygXyRDhZYc9Tw9j\n",

"xhAqVBTma8rYE4Nc8OMTjeKHpmkkFwtx5I4AR5IEOmM47S1NMD1cHcE01M+BEdZFNRLsuJSDP2ML\n",

"mRaOAa7WeG5cP8wa6N5sHKf2Gvvi1OYjrSGExVLvmM4eyMenJ++hUizrde7jtBIh5n57FXIVhY3z\n",

"w7FsmGF74Q/cLsKbf9+FXEUhxF1tMGrvm7SezObTGdhyNhNjBzhj16qhrR6rUFHIrhAjpVjIhNqn\n",

"CYRMGkhT2CwgwNma6Q8N4fMQ6m7bqRUMAqEl+qzonLL5IjLKxPj96WEY2c/JaNftqyzbcQPXsqvw\n",

"8uQBeGFi/045Z2G1BN+ey8KB+CJmt2pSsCvWT+rfLN5FIldi4hcXUVInxdJoL9hZmuKPWwVM7qO1\n",

"GReLojzx5Ehf+Dhadcr6Wlv33O+uorpejnmD+Ni8ZBAjnOoaFIgv0Oxi5tUgUc+UH1MuGxGetsy8\n",

"8kgf+2Y9hu1BqaKw+0Y+vjiVwbxIzQh3w6WMSohlSkwLdcPW5UMeamerViLH1gvZ+OVaHvN4xgc6\n",

"45WpgTr5pWVCKRZuu4bC6gYEutpg77PDdR7bljOZ2HwmA7YWJjj90hi4tDAqkKJoxBfU4EiSAP/e\n",

"LUGluFGou9iYYeZAd8wayMcQb/VkogqRDD9dzcXu6/nM98DLwQLPjgnAwkhPvW8MpAoVTiSXYm9s\n",

"Ia7n6Hfa//vCKKPksxoLrWHKwoSDf18Y1elz7e8nTmMwqqqXw8naDD+siGyxqtHbyK2sx/jPL4DN\n",

"Am68OZGJ/GorFEWjsEaiE+GUIqjT+Vtoiqe9BcI0u6GhHjyE8W1b/PsiEDpKnxWd4z47j7wqCQ6s\n",

"GdFpvXWElvnrdhE27E+Cj6MlLrwyrlNLc3mV9fj6XCYOJRQzvU7TQt2wfnJ/BLk19m4eSRLgP38k\n",

"wIzLxtkNY+FgZYqDCcX4+WoessrFANQ7VhODXLEqxrdZj19ncj27Cst33oSKohHizsNgbzvczq/B\n",

"vTIR7v+LtLc0adzF9LVHmIetQUYu3l9y15L47uQOi9p6mRI/X83F9os5jJiL8rHHa9OCmpm6aurl\n",

"WLz9OjLLxfB2sMSBNSN0XvSSi+sw77urULZzLrhSReFmbjWOJAlwPLlUJ2Dew84CszQh9KF8HoRS\n",

"JXbfyMfOK7nM+FVnGzOsHu2HZcN8mB3X+ymokmD/7ULsjytCqVCq87X354Ri3mAP2Fr0/J0kiqLx\n",

"+E83cTWrCgM9bfHX2pEG7xksqlEbjNJL1QajTx8ZiHmD+4bBaP73V5FQUNtpedI0TaNcJGsW4aRN\n",

"gbgfJ2szzY5oo3ve28GSOOcJHabPis6Rm85CUCfF4XUx3Wb2b29GIlci+qMzqJersH/NiBYNQA9D\n",

"doUYX5/NxD9JAka4zRzojvUT+6O/qw1omsbSH9RB4jPC3fD9Y5EA1E/ElzMr8fPVXMbQAqgjl1bG\n",

"+GLuII8HZjW2BRVFI61EyPRiHr1Tovc4X0dLZhczytcBAc5tn/LTGdzMqcKSH24wn4d72OLDeWHt\n",

"yuWUKVX442YBvj2fxeysBLnZ4LVpgRgf2DzwXyRV4LEfb+JOUR1ceWY4sGakTp6mTKnCnG+u4l6Z\n",

"CNPD3PD9Yx3beW11DKeTFWZF8DEnwh0edpbYG1uAHy7lQKAp09tamOCJkb5YOdIX9lb6RbiKonEp\n",

"swLfnsvC7fwa5nYzLhszwtVz34f7O/ToF+2SugZM++oy6hoUeH58P7wyNdDg16yXKfHin4k4k1YG\n",

"AFg3PgAbJgf2eoPRb9fz8M7hFITyefj3hdEGu06tRK4Z8dkY4ZRTod+wZGOuNiyF8m0ZMRrgbNWs\n",

"FYVA0EefFZ1RH51BpVhGRo0ZEe3o0aXRXvjkkYEGu05mmQhfnc3EvxpRx2IBcyL4eGFif8iVFGZ+\n",

"fRkUDex5ehhi7mutyK4QY5dm2pE2I9TByhTLhnrj8RE+cG1HualepkRiYS0TwB6f33zKT1NenxaE\n",

"hZGe3SLj0f+Nf3VecFgsrcs9CA4tCC5ALboOJRRj85kMZvfEx9ESL08egNkD+XpFglShwhM/3cLN\n",

"3GrYW5pg37MjdDI0AeDTE+n4/kI2HK1MceqlMZ0SmC1VqHA+vRxH7ghwNk13DGeQmw1mR/AxLcwN\n",

"t/NrsO1iNmPYsjTl4NGh3lg92h9uti3/PmgNdPfj42iJRZGeWBjp1er9uzP/3inBut/jwWYBe581\n",

"zJvI+6EoGp+duoetF9S92VNDXfHl4kHtimHradTUyzF04xkoVDROvTQGA+77uzAkDXIV0krVEU7a\n",

"cZ/3SkVMikNTzLSGpSYRTkFuNp3yZp3Qu+izonPgeychlCpxdsNYBBi4L4mg5kZOFZb+cAPWZlzE\n",

"vjXJ4A7KtBIhtpzJxImUUgDqBvp5gz1QXS/HhXsV6O9ijWMvjtZbHqyTKLA3rgC7ruUzWY1cNgsz\n",

"B7pjVYyf3t3xMqGUEZhxeTVILRE2n/JjxsUQH3tmFzPEnYdVu2JxO78G/VyscfC5kV0yOel+Bn1w\n",

"CrUSBX5fPQwHbhfh7/hiAOrdvtemBWJptK7LnaZpnEotwxen7iGjTN2q4GJjhhcm9seSaK8WS7AK\n",

"FYU1v93G2fRyWJtx8cfq4Qj31O2BTCiowSNbr4GigW3Lh2BamHunP16xTIkzqWU4kiTApcwKncip\n",

"CC87zAx3A5fNxt8JRUguVpuuTDgsPDLEE2vGBsDXqXkfMEXRWLz9OuLya+BkbYbJIS44klTCjG5l\n",

"s4CxA5yxJNoLE4Jc9c7i7s5s2JeEv+KL4GlvgWMvjgbPSL+3f8cX4b9/qQ1GwRqDkUcvNhit/jUO\n",

"p1PLsHZcAF6fFtSla1GoKGSWiXV6RFMFQr1vpjlsFvppDEshTUxLxvo9IXRP+qzoDHrnOKQKCpdf\n",

"G69TxiMYDoqiMfbz8yisbmhXT97Dklxch6/OZDKluaa8MysET7UyXUeponAmrQw/XcnDrbxq5vbB\n",

"3nYY3d8Zztam6pnl+dUorG7eF+VhZ6GJLlKLzAGuNs0imspFUsz55ipKhVJMCnbBD49HdXnZMOaT\n",

"cyiubWDaT2LzqvHOoWRmwtNAT1t8MFddcr+WXYlPT9xDYmEtALUwXTsuAE+M8G31jYWKovHS3kT8\n",

"kySAGZeNX1cNxbD7Qv+lChVmfH0ZORX1mDuIjy1LDR+6XiuR42RKKY4kleBadiWz48tiAdE+DrC1\n",

"NEFuZT3TB8xmATMH8vHcuIBmVZOMMhFmfn0ZChWNrY8NwdhAZxy7W4p9sYU6v0+OVqaYP9gDS6K9\n",

"mu3ydldEUgVmfK0eGrBgiAe+XDzIaNe+na82GFWK5XCyNsX2x6MQ6dM7DUbH7pbguT3x4Nua48rr\n",

"E7r8ueF+KIpGfrVEZ8JSikDI9ETfj7eDJVOWD+GrDUvdobpDMA59VnRqy4c335zYrpIp4eHQxoCM\n",

"7u+E354aZtRrJxXW4qszGTp9mwDwz/MxLUYtaZEqVPj9ZgE+OJra4jEsFhDsxlOLTE1PZlsjXu4U\n",

"1WLRtuuQKSn8Z0I/bJhi+D651mDSHVYPw8gAdQuCUkXhtxv5+LKJy70pFiYcrBrli2fGBDzQNEPT\n",

"NN4+lIw9NwvAZbOwY0WU3kk3Hx1NxY9XcuFiY4ZTL415KJd+R6gQyXA8uQRHkgTMtCRAvYtjxmVD\n",

"ct8Oz4QgF6wbH4BIn8Zy8xen7uGbc1lwsTHDmQ1jmZ2enAox9sUV4a/4Ip0RiIO97bAkyguzIvgt\n",

"Gpe6C3F51Vi8/TooGkYftFFUI8HqX28jrUQIUw4bnzwS3iuny0kVKkR/fAYiqVLn77E7Q9M0SoVS\n",

"nQinVIFQZ8JXU1xszJgIJ2153tO+bbFvhJ5FnxSdKopGwJvHAAAJ70xu0RRA6HwKqiQY89l5sFjA\n",

"tf9OaHH0oiGJL6jBF6fu4WpWY8zNihE+eG5cP6bHrrpejttNAtjvFtXp7WVqypwIPv4zoV+Hd6oO\n",

"JhThpb1JAIDvlg3BzIGdX0ZuK/O+u4rEwlrsWBGFySGuOl+7nl2FR3fc0LnNhMPCldcntPkN3CfH\n",

"07HtYjZYLODrpYMxO6K5WLmVW40lP1wHTQM/PRmFCUGues5kPAS1Dfj3TgmO3BE8cI79UD8HrBvf\n",

"D2P6O0GmpDB9y2XkVtbj8eE++HCe7vxypYrChXsV2BtXiHPp5UxLhqUpBzPD3bE42gtRPvbd9gVY\n",

"K6ptLUxwYv1oo/5N18uUeGlvIk6lqqsYa8YG4LWpvc9g9Mbfd/DHrUIsivTEZ4siuno5HaamXq6z\n",

"G5osqENuZX2zxA4A4JlzGce8NsLJ39naaMM8CIahT4rOBrkKwe+eAACkvD+1Vzeid0cWb7+OW7nV\n",

"eHVqINaN79dl69h+MRubjqc3u51nztU7q9zZxowpk0f52KOfizWOJ5fipyu5SG0ypWZ0fyesivHD\n",

"2AHO7X7x23gsDT9cyoGFCQd/rR2JEH7XmNwe+/EGrmZV6bRBFNc2YMuZDBy4XaTX1TrQ0xYfzg17\n",

"YBrE9xey8OmJewBankNfL1Ni+pbLKKiWYHGUJz5d2L1eaPMq63H0jgBHkkpwr0zU4nFhHjw8N64f\n",

"bC1M8NiPN8FiAQfWjGyxFFwukuLv+GLsiy1ETmXjpCl/ZyssjvLCgiEe7c5rNDQKFYWFW68hqagO\n",

"IwMcsfupYUYVfRRF4/NT9/C9xmA0OcQVXy3pXQajW7nqHWVj9cMbk3qZEumlmh1RTYk+o0zUbJQv\n",

"AJibsBHkphvhNMCVGJZ6En1SdNZJFIj44BQAIPPj6WQ2rZHZF1eI1w7cgb+TFc5uGGv0HRyFikKK\n",

"QB1d9NG/aS0eZ29pgmlhbojycUCUr32L+XQ0TeNWbjV+vpqHU6mljCDzd7LCkzG+eGSIZ5tfAFUU\n",

"jSd/voXLmZXwsLPAkf+MatUtbii05oWN88MxNdQV353Pxu4b+cxu7+QQV7wyJRABzlb49Xo+Np9W\n",

"l9xZLGBptDdemxqot4Lw2418vHMoGQDw5owgPDMmQO/13zmUjN9u5INva44TL43p1uaDe6UijQAV\n",

"IK/JGM6meDtYoqBa/bVAVxsc+c+oVo1DNE3jdn4N9sYW4uidEiZJgcNmYXygC5ZEe2F8oHO3ianJ\n",

"qRBj5tdX0KBQ4a0ZwVg95uEzJdvLwYQivP7XXciVFILcbPDjE1EPPf2su0BRNMZ8dh5FNQ345lH9\n",

"lYHehFxJIaNMpIlxUkc4pZUIm7WzAGqDZz8Xa50Ip2B3m25hyCQ0p0+KznKRFEM/PgsWC8jZOKPb\n",

"lq16K2KZOrOzQaHC38+NNPiEEaFUgfj8GsZZnlhYC6mi9VI5oO5RfGKkL54Z499m4VdYLcGua3nY\n",

"G1vI9D3amHOxNNoLK0b4tsm0VidRYO53V5BXJcFwfwf89tQwo78xWv9nAg4lCmBtxgVN04w7dbi/\n",

"A16bFtTsZ1YukuKTY+n4O0HtcrezNMFrU4OwJNqLKYcdSijGS/sSQdNotW/1alYlHvvxJgBg91PD\n",

"MKp/9+9hA3THcB5NEjD5nvpoT9+uWKbE0SQB9sUVIr6glrnd2cYMjwzxxOIoT4NPBmoLv98swJsH\n",

"78KUw8ahdTFdsksfX1CDZ369jUqxTGMwitTpr+3JfH7yHr49n4UJQS746cnorl6O0VFRNPKq6tXl\n",

"+SampRqJQu/xvo6WOhFOoXwenDohao3wcPRJ0Vlc24CYT87BlMtGxkfTjXJNgi4v703E3wnFWDbM\n",

"Gxvnh3fquYtrG5gxkrF51Xqn/NhZmmhGSDogoaAGp1LL4GhlinOvjENCQQ02n85AkqZvz8qUg5Ux\n",

"fnh6tF+bjSximRJ/3S7CL9fykKspk7JZwJQQN6wa5Ydo39Z79DLLRJj33VXUy1V4YoQP3p8b1uKx\n",

"nY1UoULQOyd0bgv3sMWrUwMxur9Tq+u+mVOF//snhXG5R2hc7hUiGZ7dfRsqisYTI3zw3pxQvecR\n",

"SRWY9tVlFNc2YPlwb3w0r3N/N4xF0zGce+MK9b7JCXC2wt9rY9o18zqzTIR9cYX4O74YVU3cwUN9\n",

"HbAoyhMzB7rD0rRryso0TWP1r7dxJq0MA1yt8c/zo7qk7Flc24DVu+KQqjEYbVoQjkcie77BKLtC\n",

"jIlfXASHzcLNNycSAQX175ygTqojQlMEQpS08IbPjWeuEaE8RpB62BHDkjHpk6JTO9PWxoyLu+9P\n",

"Nco1Cbpcy6rEsh9vwsZc3aPU0RcnFUUjvVSo2cVUG3/0PeH4OFoi0sce0b7qcZL+TtZM35lcSWHa\n",

"lkvIqajHqhg/vDs7BDRN41x6Ob48nYEUgbpf08aMi6dG+2HVKL82l3spisaFjHL8fDUPlzMrmdvD\n",

"PHhYOdIPsyLcWxxpeTq1DKt/jQMAfLIgHEv19D52JkoVhb/ii/DVmUyd7+H3jw3B9DC3Nj8xK1UU\n",

"fr2ejy9PZzCZlFoWDPbA54siWuz5e/3AHeyNK4S3gyWOvzi6V/TlacdwHrhdhIOaneD72bVqKMY8\n",

"QNA3Ra6kcC69DHtjC3Exo4Jp6bA242J2hHry0SAvO6O/mFaJZZj61WVUimVYGeOL/5sdatTra5HI\n",

"1Qajkylqg9GzY/3x2tSgHm9CmfvtFSQV1eH/ZodgZUzLUW99nSqxjAm01wrR3CY90k2xszTR2Q0N\n",

"5dvCz8mqx/+udFfaLTplMhk2bNiAkydPwtzcHBEREdi9ezeOHTuGt99+GxRFQalU4tVXX8UTTzzR\n",

"5vMaU3TeKxVh6leX4GhlitvvTDbKNQm6UBSN0Z+eR3Ft+3qUJHIlEgtqEZev3sVMKKhtJmw4bBbC\n",

"+DxmXnmkr/0DzReXMiqw4qdb4LBZOP7iaGbyhzb0fPPpDGb3jmfOxTNj/PFkjF+7Im0yykT4+Woe\n",

"/o4vYqbfOFmbYflwbzw2zEdvVp12qo0Jh4U/nxlukFIhRdE4nlyKL07fY6buaHmY6VHlQimW/HBD\n",

"58n+w3lheGyot17ReT69HCt/iQWLBfy5enizzM7egFxJ4dfreS32Ej8yxBNrx/mjn0vbExBK66T4\n",

"K74I++IKkd+kp3SAqzUWR3lh/mCPTpng1FbO3yvHyp9jAQC/rhqKMQOcjXbtplAUjS9PZ+Db81kA\n",

"gEnBLvhq6eBuH0PVGr9czcV7R1Ix0NMW/zw/qquX06MQy5RIK1GX5pM1gjSzTASlHlekhQkHwe42\n",

"OhFO/V2tW9wgILSddovOl156CUqlEl9//TVYLBZKS0vh6uoKR0dHXLhwAQMHDkReXh6CgoJQUVEB\n",

"G5u2PXkaU3TeLarD7G+vwN3WHNffmGiUaxKao41aGRfojF9WDtV7TLlQqtnBVPdjpgiaT/mx1pny\n",

"Y49BXnYdKjE+82scTqWWYWSAI/Y8PUxnl4iiaJxIKcXm0xnI1ISC21ma4NkxAVgxwqddO3I19XL8\n",

"EVuAX6/lo1So3lE05bAxO4KPlTG+CPNonMhD0zTW/R6PY3dL4WRthiP/iem0SBqapnEpsxKfnUxn\n",

"puzYW5pg3fh+kCpU+PxUBuYP9sDmJYM6dP57pSIs3n4ddQ26PVfakntTl3utRI4pmy+hXCTDU6P8\n",

"8M6skI4+rB5BUwe/Pkw4LKyfpB4d6u3YNjMMRdG4mVuN/XGFOJZcwpT0TTgsTAp2xeJoL4zp72yU\n",

"HZx3Dyfj1+v5cLYxw8n1Y7rEDKflcGIxXj1whzEY7VgR1WMHglSJZRi28SyUFI0zL49FP5eu7+Xt\n",

"yciUKmSU3jdhqUSotx3GhMNCfxcbpjwf5mGLYHder6jGGJN2ic76+nq4u7ujqKgIPF5jkzhN03By\n",

"csLBgwcxZswY3LlzB9OnT0dubi5MTdv2ZGNM0Xk7Xz1Wz9vBEpdeG2+UaxKao21zYLOA629MhLO1\n",

"GbIrxMwu5u38Gp2dGy3utuaI0pTJI33sEeTG65QX0oIqCSZtvgi5ksLWx4ZgenjznEwVRePfuyX4\n",

"6kwGsyvoaGWKNWMDsHy4T7uiTBQqCieSS/HT1VwkNDGIDPVzwKoYP0wOcQWHzUK9TIlHtl5DeqkI\n",

"Az1tse/ZEQ/dKxdfUINPT6TjRo56Ko6VKQdPj/bH06P9YGNugj038/HWwWRMCXHFDyui2n3+/Kp6\n",

"LNx2HRUiGQZ52WHXqqE4cLsImzUldxYLeHSoN16dona5a41L/s5WOPbC6F4fgaJQUZj9zRWkl4qw\n",

"YIgHpoW64Znfbus9NsLLDrMHumPWQH6bZ7ULpQr8k6g2HzXNFHXjmWNhpCcWR3m1Wcx2hAa5CrO/\n",

"vYKscjGmhrpi2/LILu2bSyiowTO/3UaFSAZHK1NsezzSKPPiDcFTv8TibHo5nh/fD69M7dohEr0R\n",

"FUUjt1KsE+GUIhA2e/MMqAeC+DlaNTEsqXdFu/JNVnenXaLzzp07mDNnDpYuXYozZ87AwsIC7733\n",

"HiZOnIgzZ85g6dKlsLKyQk1NDf7++29MmjRJ73lkMhlkMpnObe+88w62bNnycI+mjWjDrfu5WOPM\n",

"y2ONck1Cc+43rNhZmqD2Picii6WOmIn2dWAm/RhyzvKXp+7h63NZ8LCzwJmXx7YoIlUUjX+SirHl\n",

"TCYTk+NkbYbnxgVg2TDvdoumhIIa/Hw1D8fuljDlHk97Czw50heLorwgbFBgzrdXUCNRYP5gD3y5\n",

"OKJDL+L3SkX47OQ9ZiSoKYeNx0f44LlxATol2EMJxVi/NxGj+jlh99PtmxxVWifFwm3XUFTTgCA3\n",

"G/z5zHDGgFUulGLjsTQcShQAUO+sDvKyw/l7FWCzgL/WjsRgA6cZdBfiNTPlaRrY8/QwxPRzQmJh\n",

"LTYeS8Ot3Opmx7NYQLSvA2ZH8DEjzK3NJfO0EiH2xhbiUGKxzt/XCH9HLIn2wrQwN4OI/OTiOsz/\n",

"/ioUKhqfPjIQi6O9Ov0a7UFQ24DVv8YhRSCECYeFjfPDsSiqa9fUEY4kCfCfPxLgYWeBy6+N73VB\n",

"+N0RmqZRVNOAFIEQqQJteb4OZUKZ3uP5tuYI4dti5kA3zB/c801snUm7RGd8fDwiIyOxa9curFix\n",

"AgkJCZg8eTJSUlKwZMkSfPDBBxgzZgxiY2MxZ84c3L17F05OzeNO3nvvPbz//vs6tw0fPhzXr19/\n",

"+EfUBi5mVOCJn24hxJ2HYy+ONso1Ceqy8u38GsTmV+N2Xg3u6JnyY27CxiAvO0T7OiDSxx5DfOyN\n",

"mtHYIFdh0pcXUVzbgBcm9sfLkwe0erxSReHvhGJ8fTYTRTXqEW+uPDOsG98PS6K92t0DVFonxW83\n",

"8vD7zQImCsTSlINFkZ4IdOPhncPJUFE03p4ZjKdHtz0LsbBags2nM3AwsRg0rXbSL4z0xIuTBugV\n",

"8adSSvHMb7cx2NsOB5+LafN1quvlWLz9OrLKxfB1tMS+NSP09tPeyKnCu4eTkVEmZm7ritGoXY22\n",

"DO3raIkT68cw4i+jTIRtF7KZCKr74bBZGBngiNkRfEwNdXvg2FFAXUo8nao2H13JqmQSHWzMuZg7\n",

"iI8lUd4I8+B16o7ktovZ+OR4OixNOTj2wmj4Oll12rk7gkSuxIZ9STieXAoAeGaMP16f1rMMRlKF\n",

"CtEfnYFIpsTeZ3pn73NPoUIkY0rz2kzRplm9z471xxvTg7twhd2PdonOyspKuLq6Qi6Xg8NRPzlG\n",

"R0djyZIl+OGHH5CRkcEcGx0djY0bN2Ly5OZGna7e6dS6ggd52eHQura/oBLaDk3TKKiWIDavcZRk\n",

"Vrm42XFmXDZjqvlgbigeHerd5WH9x+6W4Lk98TDlsnH25bFt6v9SqCgcuF2Eb89lMfOF3W3N8fyE\n",

"flgU6dVqELg+pAoVDiUU4+ereXon3rBYwK6VDzZplIuk+PZcFv64VcBM+JgR7oaXJwe22g+mzcoM\n",

"dLXByZfGtGnNIqkCy3bcxN3iOrjbmmP/mhGthnMrVBT6v3Vc57bHhnnj1amBRp+x3lWIpApM/vIS\n",

"SoVSrBsfgFenBul8vbBagh8u5WBvXCHkSv3ZsqYcNsYMcMbsCHdMCnZtU49ZUY0EB24XYX9ckc48\n",

"7GB3HpZEeWLeYI9O+RmoKBrLdtzAzdxqDPKyw4E1I7o80J6iaHx1JgNfn1MbjCYGueCrpYN6VJj4\n",

"aweSsC+u6KGMfgTDIJQqkKYpyQ/ytmt3DjVN05AqKIikCgilCgilSggbFBBJlRBKNR/v+9yVZ45N\n",

"C3pGvFy7jURTpkzB+vXrMWPGDOTm5iI6Ohq3b99GWFgYbt26heDgYGRlZWHo0KFITEyEt3fbYl6M\n",

"2dP5750SrPs9HkN9HbBvzQijXLO3o1BRSBUImV7M2LwaVIqblx4CnK2YXcxoXwf4OFpi/d5EHE4U\n",

"YMUIH3xgxDzKlqBpGo/9eBPXsqswNdQV2x9ve0+jTKnCvrgifHcuizEJedhZ4IWJ/bBgiGe7BTVN\n",

"07iWXYWfr+bibHp5s7zR4y+ORrB78xDuugYFfriUjZ+u5DHTbEb3d8KrUwMx0NPugddNLKzFvO+u\n",

"wtPeAlden/DA4xvkKjzx8y3cyq2Gg5Up9j074oEmh3+SBHjhjwQAQD8Xa+ZNib2lCV6fFoTFUV59\n",

"onR4IrkUa3bfBpfNwr8vjEagW3PzZblIip1XcrH7ej4T1K8PcxM2Jga7YvZAPsYFOj+wbE5R6t+v\n",

"vXGFOJlcylQeTDlsTAl1xZJoL8QEOD3Uz6G4tgHTvroEkVSJ9ZP6Y/2k1qsHxuKfJAFe3Z8EmZJC\n",

"oKt6glFPMRhpW8QeNnKO0PkoVRTEMiWEDUqNaNQvFJt9rvkokir0jgBtDX9nK5zbMM4wD6iTabfo\n",

"zMnJwVNPPYXKykqw2Wy8++67eOSRR/DHH39g48aNYLPZoCgKb7zxBpYtW9bm8xpTdD5MvxpBjUiq\n",

"QHxBLW7nVSM2rwaJhbWMuNFiwmFhoKcdM6880sdeb4O1Nq7I1sIEt96a2C1iKTLKRJi+5TJUFI3f\n",

"nhqK0f3bF/siVajw560CfHchGxUitfj2drDECxP7Y94gfod2e/Iq6/HLtTzsuZmv86S0YoQP1o4L\n",

"gLutBRrkKvxyLQ/bLmYzje+DvOzw2rRAjAxo+2SfzDIRJm++BHtLEyS8O6XVY+VKCs/8FocL9ypg\n",

"Y8bFH88M13Hg66NcKMXkzZdQ16DAixP746XJA5qV3Ad52eHDuWEI92z9XL0B7djRId52OLBmZIsi\n",

"r06iwK/X8/DT1VydSSwWJhxYm3OZ3zVAneowJdQVsyP4GNXP6YFveGolchxKKMbeuCKklQiZ2z3s\n",

"LLAoyhOLorw63E99OLEYL/6ZCA6bhf1rRhh8CllbSSysxTO/xqFcJIODlSm2LY/EUL/ubzCiKBqj\n",

"/ncOgjopvn9sCGboMT0S2g9N02hQqCBsUOrsNDYXiYomxyh1Pm/tTWF7YLMAG3MT8Cy4sDHTfDQ3\n",

"Ac/cBDbmXPAsTMAz54JnbgJnGzOMD3LplOsamj4ZDr8vthCv/XWnz44T6wiC2gadXcx7pULcH29m\n",

"a6GZ8uOr3sUM97Bt0ztwFUUj5pNzKBVKW3SNdwXvH0nBz1fzEOBsheMvjml3iRxQi8/dN/Kx7WI2\n",

"KsXqCTL+TlZ4cVJ/zBrI71AvmVCqwHfns7D9Yk6rx/V3scYrUwMxJcS13X16bZ3apaJovPhnAo7e\n",

"KYG5CRu/rhr2wBdtmqbx9K44nE0vRyifh0PrYhhBpFBR2HUtD1+dyWRc7suG9v6Se0ldAyZ9cRH1\n",

"chU+nBeGx4f7tHq8RK7En7cK8cOlHGZH3dbCBNG+6jd2VzIrdcZw2lmaYHqYO2ZHuGOYn+MDf++S\n",

"i+sY85FIqs7BZbGAUf2csDjKC1NCXdv95vDFPxNwOFEAH0dL/PvC6G6Tl1lSpzYYJRerDUYfzwvv\n",

"ctNTW/jfiXRsvZCNScGu+PGJ9idM9EaUKqrZbqKwxd1FjVCU6QrI+yP5OoqFCaeJUNR8tNAIRj3C\n",

"0YY5Rv3RypTTKycl9UnR+duNfLxzKBnTQt2w7fFIo1yzJ6GiaNwrFeF2fjXTk6lvjrS3gyWzixnl\n",

"a49+ztYdLsNpn0AnBrlgZzd5I1DXoMCEzy+gql6Ot2YEY/WYtht37kciV+K362rxqd2h6udijfWT\n",

"+mNGmHuHvm/xBTVY8P01vV8bO8AZ2x+P7HDZrVYix6APTgMAMj+erneXjKZpvHnwLv64VQgTDgs7\n",

"VkRhXOCD323vjyvEqwfuwJTDxpH/jNJbTi7TuNwPN3G5/3d6EBZF9t6Suzb428aMizMbxsKV9+B4\n",

"JLmSwsGEImy7mMOE8FuacrBsqDcGe9vjVm4V/r1bwrzhAdQz22eGu2N2BB9DvFufWiRVqHAiuRR7\n",

"YwtxPaeKud3O0gTzBnlgSbSX3vYOfdQ1KDBji3rE6eIoT3y6MKJN9zMGDXIVNuxPxLG7aoPR06P8\n",

"8MaM4G5tMNJWI7hsFm69NanHx/TQNA2JXKVXILbc19i40yiSKiHppF1GDpvFCMX7RWLLorFRMNqY\n",

"c7vcm9Bd6ZOic+eVXHx4NBVzIvj4+tHBRrlmd6ZBrkJiYS3i8qoRm1+DhPwaiPRM+Qlx5yFKs4sZ\n",

"5WMPlza8KLaVrHIxJn2pnit8442JeqfzdAXaXXFrMy7ObRj70I9ZLFNi17U8/HAphyl/B7ra4KXJ\n",

"/TElxK3NgoqmaZy/V45Vv8S1eIwrzwwrRvji0aHe7X5BkispDHhbbfJJ+r8pzdzRNE1j0/F0/HAp\n",

"B2wW8M2jQzBz4IN3qAW1DZi6+RJEMiVemxaI58b1a/X469nqkrs2kL83l9xVFI0FW68hqbAW08Pc\n",

"sHV5298Qqygax5NL8N35bKY0bsphY2GUJ1aP9oegtgFHkgQ4nlyqkzfoYWeBWRHumD2Qj1B+6871\n",

"gioJ9t8uxIHbRTpjUsM9bLE42gtzIvgPdNHfyFH3ItI0sG35EEwL6x5VDUBjMDqbia/PZgIAxgc6\n",

"4+tHB3drg9Gsby4juViID+aGYsUI3y5di1xJMeKvJeGoW5a+v5ex83YZLU05rQrFBwlHC5PeucvY\n",

"HeiTolMb4/HIEE98sbj7vNs2FhUiWeMuZn4NUorrmo0CszLlaKb8ODBTfgw9eWH+91eRUFDb7jgg\n",

"Q0JRNOZ/fxVJRXWd+vsilCrwy9U87Licw5QvQ9x5eGnyAEwKdmn1Ce9WbjU+PZGOuPyaZl/b/dQw\n",

"xBfU4Lcb+Ux/nxmXjfmDPbAyxk/vrmJL9H/rGBQqGtffmNBsCtJ357Pw2Un1RJ22ZjDSNI0VP93C\n",

"5czKdjmZtSX3zaczUC9XgcVSu9xfmdL7Su6pAiFmf3sFKorGjyuiMCnEtV33p2kaFzIq8P35LMTm\n",

"qX8/2CxgdgQfa8cFwN/JGleyKnAkqQSnUkp1+s/8nawwK4KPORHurY7hVFE0LmVWYH9cIU6nljH9\n",

"xWZcNmaEq+e+D/NzaPENlLaqYWdpgpPrx7RpR9eYHEkS4BWNwWiAqzV+XBFt0CD9h0G7gfKwSSw0\n",

"TUMsUzLiT1/folBvH2OjcNQ3xacjcNms5sKwDQKysUTN7fKEBELL9EnR+fXZTHx5OgOPDvXuMTED\n",

"HYWmafWUnzx1L+bt/GqdHDEtbjxzdfi6plwe5GZj9D/c3Tfy8fahZAS52eD4i6O7zTvNhIIazNeU\n",

"sf9aOxKRPp1ngqiTKLDzSg5+uprHzJAP97DFy5MHYFygs873IEVQh89O3sOFexUA1C/yT8b4YvVo\n",

"f7z0/+2dZ1gU5xqG792lVwUElSIgYEVEwN57NJZo1BSjMcYUNYklPSftJEdT1ZhoNDG2FGNMtRsL\n",

"gl2xgB0p0ouNXnd3zo+FFRQUcJelfPd1cSXM7M58OFveecvzbDzDgSvXcWlqzubZvbEyNWLb2WRW\n",

"H7zK2aTbjjS9vOyZ1tODgW0d75tV9fvwXzLzi++y21t3+Crvbz4PUK0bhFKXI1MjOdtf6UPrZtWz\n",

"8Luz5G5nacIbw9s0uJL7wh0XWRkSQ0tbM/6d16/GvY/HY2+yfH+U9vUCGv/xmQO86OLWlIJiFcGX\n",

"0tkSkczei+la6TKAts2tGeXX8r42nDdyCvnrdBK/hSWU01x1s7NgYqALjwa43uWiVKRUM+7bQ5xL\n",

"yqKPtwPrpnWtc9cvPCGDGSUDRk0tjPl2cgDd66Ae5rXsQrov3ItKLfH7Cz2wtzK958BLZYFjTqHy\n",

"rh79mmJlalRhYGhdQRm6tIRtW2ZIxsxYXmc++wW6p1EGnV/susw3wVE83dOdD0Z3qJVz1haFShXn\n",

"kjJLejE1QeatSlx+NEGmJpPp3MTc4G/0zLxighbsoUipZutLve87AV2bvLYpnE0nE/F1tuXvWb10\n",

"3ut1K7eI7w/EsPbwVW1fUmfXJswb4oOrnQWLdkeyJVwTbCnkMiYFufLyQG/tF3pGXhFjlh0i7kYe\n",

"PTztWT+9K8YKOZIkcTJO43a041yK9ovF3d6CqSVuR5UFNb0+2UdSRj6bZ/fSyiz9cTKR+ZvCAaok\n",

"nl9K/I08hn8VSl6R6oEz2RWV3D8e27FOvV4ehPwiFUOXhJBwM59pvdx5f9SDfUadS8rk2/3RbD+X\n",

"opXc6uFpz8wBrent5YBMJiOnUMmeC2lsCU8m9Mq1cuoIVbHhlCSJMwkZ/BaWwJbwFO0NlFym6S+e\n",

"FOTKwLZO2mG8qPQcHv76AAXFat57uD3P9PZ4oL9RH6RmFjBjfRhnkzIxksv43yMdmRRUNQnA6qBW\n",

"S+QU3TEhnV9cbsDlXr2NZRULHhRjhazyrGIlAaON+e1Mo5WZUZ3ugxUYnkYZdC7YfpHvQmN4rq8n\n",

"b4+o324BGXlF2onyk3E3CU/MvEtE2tRI4/JTaiPZxa1plRxMDMGsX06xLSKlzt0QXMsuZOAX+8ku\n",

"VLJwnC+Pd9X9lw9oMkffhcaw7sjVCstVo/1aMm+IT4XOLpFp2Tyy7BC5RaoK//2SMvJZf+QqG47F\n",

"k1VS0rc2NWJikCtTe7jfldEasiiEK+k5/DKjGz1bO7DrfCozfz6FSi3xdE933h/Vvko3Kmq1xOMl\n",

"AuFdPez4dUb3B85sFavUrD10lSV7bpfcJ3drxatD22BrUTdf29WhVEZMLoO/ZvbCz7XJAx8z+loO\n",

"K0Oi+fNUkradppOLLTP7ezG0vZP2mmTmFbPrfCpbIpI5FHVde6NS1obzoY7NcajEhjOvSMn2s6n8\n",

"diKB41dv23naW5rwiL9m+MjbyZofj1zl3X/OY2IkZ8vsigfKDE1+kYpXfw9nW0QKANN7e/D2HQNG\n",

"BcUqrb5ipX2L9xiKySlU3qW/W1OsTI00/Yn37GMsP/BiUxJA2pgbY2oksowC/dIog84PNp9n7eGr\n",

"FTqA1GUkSSLhpka6KCxOM1V+pQKXH3tLk3JZzA4tbWsk92MIgi+nM23NCewsTTj61qA6te7S/ik7\n",

"SxOC5/fXW3BzK7eIj7Zd4M9T5S0Qrc2MWDUl8J62d6X2lVB5r2VekZI/TiWx9lAs0dc0E88yGQxp\n",

"58S0Xh5097RDJpMxZtkhwhMyWDUlEHMTBdPWnKBIpebRABc+G9+pyoHj6oOx/HfrBSxMFOx8pa9O\n",

"++NSMzUl983ht0vubw5vy6MBLnWuZFtdSiWG2rewYfPsXjprd0nOyOf7AzFsOB6vvbHxcrTixX6t\n",

"Gd25Zbmp22vZhew4l8KW8GRtjyhU3YYz5loOm04m8vvJxHIZOX+3JkwMdOWvU0kcv3qTts2t+Wd2\n",

"r1rX6FWrJbIL7wwUy/crZuYXs+pgbLnnaQJuiawCZaVOUdXFRCHXZg3LlaVNK8ou3g4YjRUyhiwO\n",

"BeD3F3oQ6F73dUYFjZdGGXS+/ddZfjkWz9zBPrwy2LtWzlkTlCo1F1KyCLt6i7CSwZ+KSimezSxv\n",

"Sxe1aoqHg2W9vVtVqtT0+GQf17ILWflUAMM6NDf0krQUq9SM+OoAV9Jz9JKJzS1UsvpgLN+FxmjV\n",

"A9zsLLAyNSIqPUfrFtPLy555Q3wIaFXxl0tpz7KJQs6G57pX2oOqLhkIWXPoKiGRt/v+2rWwYVov\n",

"dzaeSOBk3C2e7unOb2EJ5BWpGN6hOd884V/lACjmWg4jlmrKqFXRn6wph6Ov894/57WuRv5umin3\n",

"+lxyv55TyKAvQ8jML+btEW15rm9rnR7/Rk4haw9fZe3hq9phNucm5jzfz5OJga53yW0lZ+SzLSKF\n",

"LRHJRCTe7hM2Vsjo5+N4TxtOpUrN/svX2BiWwL5L6RVOKT/b24P/PNy+yuuXJIlCpbqSPsWKM413\n",

"TlbnFOkmyyiTlWYZy2QPKyhD3ynuXTYb+SCuQvN/C+ePU4k80c2NBY807DkFQf2mUQadr24K5/eT\n",

"ibwxvC0v9tftB/mDkF1QzOn4DG0W80xCxl26Y8YKGb7OttoAM6BVU+wrKXPVVxZuv8jK0BiGtHfi\n",

"+yl1S/S41JNcIZex7eXetG1eNY3Ce1GoVPHLsXiWBUdp9RTbNrfmjeFttcNEyRn5LN8fxcYTCdp+\n",

"u34+zZg7xIfOd5Re1WqJWb+cYse5VJpZm7Jldu9Ke/FKiUrPYe3hWP44mXSXs1QpfbwdWDU1sMrZ\n",

"KJVaYsKKw5yKz6C3lwM/Tu+q15uhYpWaNYdi+WrPFXKLVMhl8GQ9L7mXSnaZGyv4d25fvdg0ZhcU\n",

"89PReH44GKN9/TlYmfBMbw8md2+FTQWSQVev57I1Ipkt4SlcTsvWbq+KDWd6dgF/nUri1xMJWm3R\n",

"srz5UFtMjeT3tAos3V56I/agmBrJ7+pXrChwjLuRx+pDt7OeX07wY0gHJ6xMjAyaWS/9XKpLrm4C\n",

"QUU0yqDz5Q2n2RyezLsPt2e6ARvYUzLzNVnMEivJSxW4/NiYGRFQJovp59qkwfvsRqZlM7RE9PjY\n",

"24PqXFD94k8n2XEulW4edvz6XPcaB1IqtcRfp5NYvDuSpIx8AFrZWzBviA+jOrWs8Ess8VYey4Kj\n",

"2BSWqO3LG9TWkblDfMpl9XILlYz/9jCXUrPxc7Fl4/M9qvS6ycwr5tcT8aw7fPUuQ4CNz3W/Z2n/\n",

"TkqlyaxNjdg5t2+NLRSrS2pmAf/bflE7eGVnacKbD7Xl0S71r+QuSRKPfafph+3n04y104L0FrgX\n",

"FKvYFJbAipAY7evR2syIqT3cmdbLvdz7UJIkCoo1uown427xy/F4Dly5XuFxbc2N6eRiS36Rqlzg\n",

"mHOHFnBNkck0vcmazOHdAy5VkdypTpCWllXAc+vDCE/UDBh9NLaj3nq8q0pZV7cVkwMY3rHuVIgE\n",

"grI0yqCzNGj4aEwHnqolQV2VWiIyLVubxQy7ekv7wV4Wl6bmBJX4lAe52+HtWHOXn/rM6G8OEpGY\n",

"WScnWxNv5THoyxAKlWq+ecKfhzu1rNbzJUli1/k0vvz3srYn19HalFcGezMx0LVKThbxN/JYuu8K\n",

"f55K1N6oDG3vxJzBPrRvaaN9zOhlB8nIK2acvzNfTvSrcsCScDOPPp8F37U9sFVTnuntwdD2Tvcs\n",

"sUemZfPw0oMUqdRV1vHUNXeW3Lu4NeG/9bDkHn0th4eWHKBIpWbp4/6M9qve660ilCo1OYVKsvJL\n",

"h1tuZxBv5RXx87F44iqQVjMxkmNlakR2QXG5CfcHwcxYTqFSfc8y99M93ens2qTCwNHSAFnGgmIV\n",

"r/0eob2xmdbLnXdGtDOoPmRphWhYBydWPlW3KkQCQSmNMuicvvYEey+l8+l43wolMD7YfJ7jsTcx\n",

"N1FgbqzAzFiOmbHm/81NFJgZK27/Xrrvju2g+eI9n5zJuaQsLqRk3dXHJJdB+5Y22oGfwFZ29y2D\n",

"NhbWH7nKe/+cp0NLG7a93MfQy7mLJXsiWbLnCi1szdg7vx8WJlXTUjwcdZ1Pd10mPCED0GSBXuzf\n",

"mqk93DE3qX4GO/Z6Lkv3XuGfM0na4HOEb3NeGeRDm+bWHIq6zpTVx1GppSpLFd3IKWTCyiPElAwZ\n",

"tXGypn1LG7ZGJGsDDecm5kzp0YrHgtzuKl0Xq9Q8slyjwziwrSM/TA00WI9xkVLN2sOxLNlzhbyS\n",

"kvvk7q2YP6R+ldy/2nOFxXsicbAyYc+8fpgYycv1LWYVKCsoR1fe65irI7tAuYzbZekyAy/WpkZE\n",

"Xcsp1/tZlv5tmvFEVzf6tWmmzTJGJGYwbvlhlGoJBysTJAlu5N627wxyb8rEQFdGdmpR5febPpEk\n",

"ia/3RbFodyQAfX2a8c0T/hW2I9QGl1KzGL7kAMYKGSfeGdzgjBMEDYNGGXQ+9cMxDly5zuJJfjzi\n",

"71Jun1KlpuuCvdws82GnLxysTHGwMrkjoL0d4N4d6MpLAl0FZiYKzIwU2sBYGxyX/F7ffV9v5RbR\n",

"dcEeilUSO17pU2V/59qioFjF4EUhJN7KZ94QH14edO+BtPCEDD7fdZmDUZoSpLmxgum9PZjR11Mn\n",

"8lVR6dl8tTeKrRHJSJKm5Phwp5a8MsibA1eu8eGWC8hlsO6ZrvTxblbpcbIKinn8u6OcT87Sbpvc\n",

"3Y2Px/qSnlXAT0fj+PlYvDYYMDdWMD7Amad7emgF5EsDJFtzY3bP7atTu9SakpKZz/+2XWRrifSN\n",

"vaUJbxio5K5Uqe/qT8yqoF+xbOB4I7ewnPi6rjA3VtxzMlrzXyMiEjPZdDKx3HP7+TTjtWFt7ps5\n",

"VqkljsXcYEtEMtvP3tuGc1lwFF/8G4mVqRGbZ/ciMi2b38IS2X85XXtTZWVqxCi/FkwIdMXf9d7e\n",

"8bXB9rMpzPvtDAXFalo3s+SHqUEVSprVBg99dYCLKVl8PLYjk/U0tCcQPAiNMuicuPIIx2NvsuyJ\n",

"iv2iT1y9ybPrwsjML0Yugxf7t8be0pT8YhWFxSryilRcSMnicPSNWllvTTCSy25nXk3k2gDVrEyA\n",

"WnHmtjSglZfJ9N4ZAMu12/Wp61baBlHdqdbaYkt4Mi9tOI2FiYL9r/XH0fru4CoqPZsv/41kx7lU\n",

"QDMI9kRXN2YN9Krw8Q/K5dRsvtobyfazmvPJZRptz6SMfE5cvYWtuTGbZ/eilf3dX4r5RSqmrD7G\n",

"iau3sLc0YUh7J349kcA4f2cWTeqsfVxBsYrN4cmsOXRV6/MNmiCkm6cdX/4biUot8dVjnRnT2Vnn\n",

"f+ODcDjqOu9trnnJXZIk8opUVdJfvL3/dqYxu0B513BgTVHIZVW2CrzTW7pUo7G6N6en4m+xPDia\n",

"PRfTtNv6+TRj1gAvunrcX6qnSKnmUNR1toQns6sCG84Rvi346VgcGXnFBLZqyq/PdcdIISc1s4A/\n",

"TiXyW1hCubK/t6MVk4JcecTf2aC93+eSMnl2XRipWQU0sTBm+ZNd6NnaodbX8X1oDP/bfpHAVk35\n",

"/cWetX5+geB+NMqgc+yyQ5xJyOC7pwIYWokkz5W0bKauPk5ypuZDZP4QH/KKVITF3eJk3K0KM6Ft\n",

"nKwJcG9KUEmp3KWpxuVHrZYoUKooKFaTX6wiv0hFQbHmp/R3TUBbsr/0MUoVBSX7Sp9bUGaf5jhl\n",

"therdCYyXFVkMsplXCtvRZCXD2Dv8fjSx5X25FmYKDj93pA6N5EpSRKPLD/MmYSMuyxVkzLyWbI7\n",

"kj9Kei5lMnjE35m5g330MoF8JxeSs1iyJ5J/L6Tdtc/HyYo/Z/Yq50RUpFQzY30YIZHXsDYz4tfn\n",

"unM6PoP//H2u0h4xSZI4GnOTNYdi2X0x7a7X3oX/DqsTZdCyFCnV3MorYsmeK2w4Hq/dbm6sYEZf\n",

"TetBhZI7BbcldyqS+6kJFiaKKnlKlw0cF26/RFjcLVrYmhH8an+DDRVeTs3m2/1RbA5P1mYgA1s1\n",

"ZdYAr7vsWyujoFjF/svpbAlPYc/FtHI2nKVMDHThs0f9tL+r1RLHYm+yKSyB7edStDqjxgoZg9s5\n",

"MTHQlb4+zQziipOeVcCMH08SnpCBkVzGh2M68GS32s02pmUV0GPhXtQShL42oM56xgsaL40y6By5\n",

"9ADnk7NYOy2I/m0c79qfmVfMyfibbI1IuUuguxQTIzmdXTQuP0GlLj8G7hEr1a0rKL4jwC0TvJYL\n",

"YLUBrap8QFsm+C0sVpUJhNWaTG+xSmdfvNXBxOh2e4G5iSbLWr694HZm934Z2rLbzY0VmJZpXajO\n",

"MMCJqzeZsOIIchnsnNMXe0sTlgVH89PROK2cy5D2Trw6tI1BHFfOJmayZE8key+ll9veoaUNW2b3\n",

"Ri6XoVJLvLzhNNvOpmBurODH6V0JdLfjr9OJzN0YTh9vB36c3u2e54m/kUffz8sPHtmYGfF4Vzem\n",

"9HTXyeS6JEnkFqlq5C1d+viKXJ5qgpFcVolN4N0B451WgaU+1DUZOsnMK2bQohCu5xQyZ7A3cwZX\n",

"zYZUX8TdyGVlaAy/hyVqX+/tWtgws39rRvi2qHLwl1OoZO9FjQ1nSOS1u4aU/jOyHSM7taCF7e3X\n",

"UVZBMZvPJPNbWEK53tHmNmY8GuDCxEDXWg+6CopVvP57hNas4Ome7vxnZO0OGJW2j9V1HWpB46RR\n",

"Bp1l7f16eNqTeKu8y8+9eqfat7Dho7Ed6ehsU+cyb7VJsep2hrWgSF0moFVpA1pNNrbM48pkdctl\n",

"dssEvwV3BMa6cvuoDsYKGWZGCm1/bLmMbAUtB2V1++7ktWFt6NHavlywrDm2HBNF7VnOnUnIYPHu\n",

"yHIi8ACH3xzIV3uusDEsAWOFjB+mBtHXR9Pzuet8Ks//eJIubk34c2av+x5/3PJDqCXo5mFHalaB\n",

"tgyqkMsY1kHjduThYHnfgZeKAsdSm0Fd3etYmRppg7+K3u+j/FrS3dOuXK+jbRlxbzNjw9kFlrZ1\n",

"mCjkbH+lj7aX1pCkZRXww8FYfj4apy2ZezhY8kI/Tx7xd6mWs1hmXjE7z6fwxh9n79rX1d2OUX4t\n",

"eMi3RTkbzospWfwWlsBfp5PIyLvdM9rD055JQa4M79i81rLCkiRpe1NBo2/7zRNdas16+M9Ticz7\n",

"LRx3ewuCX+1v8J5XgaAsjTLo7Pd5MHE38ghyb0r8zTzSsu52+fFw0Lj8BLnb0cnVlm/2RWmHEN58\n",

"qC3P9/UUb+Za4HxyJiOXHgRg60u9MTOWk1+k1rYX3B3Qqu9qXShQqrUtDXcGxmUD3NpGLqP80Ngd\n",

"2dh7DpNV1ItbQWBsXtJ3WzosczLuJuO/PVLher59sgsP+d7ucT545TqTfzhG2+bW7JzTt9K/o6BY\n",

"xcilB4i+lstov5YsfdwftVoi+HI6qw/FcihKt73PxgpZ5WXoO/oW79RstDEzxsrM6K4MXJGyRFh+\n",

"7+0p96e6t2Le0Da1FixUFUmSmLb2BPsvX9OZl72uyMgrYt3hONYcjtUGf81tzJjR15PHu7pWq90i\n",

"M6+YoP/tqVAAXi6DXl4OjOrUkmEdb9twFipV7L6QxsYTCRyMuq5t+bA2M2JM55ZMCnSjo7NNrXx2\n",

"7zibwrzfwskvVuFZMmDkUQsDRrmFSgI/3kN+sYo/Z/aki1vFjmQCgSFolEFn38+Cib95uxndSC6j\n",

"o7MtQe5NCSiRL3K4oyldrZZYsP2i1oP36Z7uvPtwe4P0DjU2Stsh/jumA1P0pKtatjWhfPZVXS5D\n",

"WxrQZhcq+flofIVaq7287ClWShUExmryipQ6y9ZVh3K9s8YKYipwggF4qGNzXO0sMDOScyk1W9sT\n",

"umRS57t6cUsD20W7I/nrdJJWzudOqZZLqVmsPXSVv04nUahUY12SZbx3H+Pd22xKftfn8FpKZj4f\n",

"b7vItpIbTAcrE958qB3j/J3rTGAHGh3VoYtDyS9WVSr9ZkhyC5VsOB7P9wditDf1TS2MmdbLg6k9\n",

"3KvcinQ46jpP/nAMSYKPxnSgUKlmS3gy4VWw4Uy8lcfvJxPZFJZY7n3aroUNkwJdGOvvrHdZoXNJ\n",

"mcxYH0ZKZgG25sZ8+2QXenrpf8Bo7sYz/HU6iae6t+KjsR31fj6BoKo0yqDzz1OJ7DqfqrWT9HNp\n",

"UmWNxFUHYvh420VAo4e4aGLnBu8QZGhWH4zlv1sv0MnFls2zext0LWq1xI5zqXz572Vt4NbC1oyp\n",

"Pd35eq/GfvHzRzsxIbBiMXRJkihWSRX0y5YJcO/M1BaX77MtKDNIptmmvn2sMo/XlUVgdTBRyG/3\n",

"x2r7ZTWDZMYKORYmCixNjO7bunC7haF8366pcakkmEyv2aqDV67z/uZzRJdolQa0asp/x3SgQ8u6\n",

"IyxfOqlsa27Mnnn9aGZdt5y7QJN5/PNUEitCorXtFpYmCiZ3b8X03h5VktNasP0i34XGYGdpws45\n",

"fXC0NiPuRi5bI1LYEp7MpdQ7bDjbOjHKrwX92zhiZqxArZY4HH2DjWEJ7Dqfqm3ZMVHIGdrBiUlB\n",

"rvRq7aC3m4r07AKeW3+SMwkZKOQyPhjdgaf0LGcUGnmNKauP09TCmGNvD65We4NAoE8aZdD5oGwO\n",

"T+bV38IpUqnp6m7H91MCDT5E1JC5kVNItwV7Uaol/p3bFx+n2h/IkSSJ0CvX+XzXJc4laWSC7CxN\n",

"mNm/NZO7t8LMWMF3odEs2H4JJxtT9r86oEZi77pEqVJToLydqS0NZH8+Gs/GsIRqHauXl/1dgfGN\n",

"3CKD9NyCpk+0QvUDbS/u3WoJGpWFyobMyrcumBsrkMtl/Hw0nq/33S65T+nhztwhPnWi5K5UqRmz\n",

"7BDnk7O0bQ11FaVKzfZzqSwPjtIGiSZGciYGuvB839b3VHQoVKoY880hLqVm079NM9Y8Xd4KNDIt\n",

"m63hyWwOT+ZqGTklK1MjhrZ3YpRfS3p7O2CskJORV8Q/Z5LZeCKBC2XkvpybmPNogAsTAl1waar7\n",

"4aOCYhVv/hHB32c0A0ZTerTivYfb623ASKWW6L5wL9eyC/l+SiBD2jvp5TwCQXURQWcNORx9nefX\n",

"nyS7UIm3oxXrnulKy1rylm6MPLc+jH8vpPF8X0/eGtGuVs99Mu4Wn+28xLHYm4AmU/NsH0+e7eOB\n",

"dRn3kbKC8fOH+PDSfQTjDcHOcynM/PkUagmm9/ZgYqArjyw/RF6Riqd7utPPpxmLdkdyNqm8k8yp\n",

"d4dgZ1m+FPneP+dYfySO5jZmbJ7dC2OFvFzmtrDMIFlFw2RlWxcqakWoSF6stlsTZDIqlSHr2doe\n",

"CxOjkoC2Il1b+d29t2WC3/IZXUWNWnXOJmYyZtlB1BKVqnHUJSRJYt+ldJYFR3EqPgPQ3ECM9mvJ\n",

"i/1bV3pDGZmWzcNfH6RIqa60zUaSJM4nZ7ElPJkt4ckkZxZo9zWxMOahjs0Z1akl3TztUchlnEvK\n",

"ZOOJBP4+k0R2gcYHXiaD3l4OTAx0ZWgHJ50Oi0qSxPL90Xy+6zKgOc+yJ7roLWHx8dYLrDoYywjf\n",

"5ix/MkAv5xAIqosIOh+AiylZPL3mOGlZhTS3MWPtM0G0bV63nHMaCqWT1M2sTTny5sBakSC5nJrN\n",

"57sua4WwTYzkPNW9FTP7t65UiHpzeDIv30cw3lAcuHKN6WvDKFKpmRjowqfjOyGTydh5LpUXfjoJ\n",

"wGePdmJCgAt7LqbzyY6L2vIywNzBPkzr7Y6NmTGHoq7z5KpjAPw4/d4uR7pCkiSKVGoKKhgkuy35\n",

"dUeLQmUqCmWGzMrLiWl+dOUrXh1KJcHKDZPd4TxW0TBZaRADsGiiH00tTcrJiGkMH24fsy64lUmS\n",

"Rm9z+f5oQssoKgxp78SsAV50dm1y13PWHIrlwy0XMDWSs+3l3ng5Vl7xUKslTifcYkt4ClsjUrie\n",

"c3tYtJm1KSN9WzDKrwX+rk0pUqnZdT6VjScSyhl+NLEwZmxnZyYGutK+pe4+13eeS2XuxjOaASMH\n",

"S1ZNDcSzme4VCEqHME2M5Jx4Z3CdyM4LBCLofECSMvKZuvo4Uek5WJsZ8d1TgfRobW/oZTU4ipRq\n",

"ui/U2JOumRbEAD1mdOJv5LF4TyR/n0lCkjSTshMCXHllsPd9s9mSJDF2+WHCEzJ4opsbCx7xvefj\n",

"a4uTcTeZvOo4+cUqRvg25+vHu5TLrJV6yZso5Pz6fHe6uDVFrZbwfHt7uePYmhvzeFc3fj0RT0Ze\n",

"MU92c+N/deRv1CXFqtt6t2WD1OwCJd8EX+FozM1yj3+hX2tMFLJymrYV6ePemdmtSBBd3xiVtiaU\n",

"UUso2y9bkSWvNuC9oxe3MkteU2N5lQe+ziZmsnx/FDvPp2qzyr287JnZ34uere21x1CrJaauOc6B\n",

"K9fp0NKGv2b2qlKv4n1tODu1YJSfxoYz4WY+m04m8PvJRFLKZEp9nW2ZGOTKaL+WOgnezidnMmNd\n",

"GMmZBdiYGbH8yQB6e+t2wEiSJIYvOcDltGwWjvPl8a51a9hM0DgRQacOyMgr4tl1YYTF3cJEIWfR\n",

"JD8e7tTS0MtqcHyw+TxrD19lZKcWLHuii86Pn55dwDf7othwPF6b6Rrh25x5Q9pUSwvxeOxNJq7U\n",

"CMbvmtMXbwP0oJblQnIWk747QnaBkr4+zfh+SsBdZUO1WuLFn0+y63wajtambHmpN042ZnT6YBdZ\n",

"BUrmDfFhc3iy1j6ylBPvDK6TAyz6JjlD4+W+7eztKfe3HmrHuC7O1Rpw0pVb2bazKVrDBrlMI/lW\n",

"F9zKyhs3VGKtW7IvKaOgnL1mKRMCXHjYryWWJgqyCop5Zm0YAJMCXflgdIdykmD3o6wN578X0sgp\n",

"VGr3eThYMqokAPVsZkXolWtsCktg94U07eeBqZGcEb4tmBDoQncP+wcaPkrPLuD5H09yOr5kwGhU\n",

"e57SsTrHipBoPtlxia4edvz2fA+dHlsgqAki6NQRBcUq5vx6hp3nU5HJ4N2R7Xmmt4ehl9WgOJeU\n",

"ycNfl5SL3h6ss16ozPxiVoZEs+bQVa1eZx9vB14f1hZfl5pNKz//Yxi7zqcxsK0jq58O0sk6a0LM\n",

"tRwmrjzC9ZwiAls1Zf30rpVqJeYUKhm//DCX07Lp7NqEX5/rzsAv9pOcWcDm2b3o0NKW+b+d0Q5D\n",

"gCbYeqHf7WGqxsaBK9d4/5/zWiWDIPemfDi6o07LsVVl1s+n2HY2hU4utvw1s1e5THZDdysrdScr\n",

"zbiW9tTebi8on501N1aATMbRmBscj71Z4THHdG7JhABXmlmbsvNcKpvDk8q1m7jZWTAx0IVHA1xp\n",

"bluzNpqCYhVv/XmWv05rnO+e6t6K90a111kLREpmPj0/2YckwYHXB9SKBa9AcC9E0KlDVGqJD7ec\n",

"Z/2ROACe6+vJm8Pb1il9v/qMJEk89NUBLqVm8/HYjkx+QNmR/CIVaw7HsmJ/NFklgwSdXZvw+vA2\n",

"9Gz9YKWumGs5DF0cilIt8fOz3ehVC9p8d5KUkc+Ebw+TnFlAh5Y2bHiuOzZm9w7U42/kMXrZQTLy\n",

"ihnfxYUzCbeIvpbLhhndad/ChqFLQkjLKqSJhUZovVTvtpm1KbP6t+axrm6NLvgsVKr44WAsX++N\n",

"Ir/49pT7vKE+9/331iXpWQUMWhRCdoGS90e1Z1ovw9z06sqtLPFWXjk9zvrA4HaOGseq+6ollB8k\n",

"W3f4Kr+e0ChK6FoR5Ynvj3I4+gavDvVh9sC6N9woaFxUO+gsLCxk/vz57Nq1CzMzM/z8/Pjqq68Y\n",

"NGiQ9jF5eXnExMSQnp6OnZ1dlY7bEIJO0ARG34ZE89lOTXP/mM4t+fxRP6GTpiNKdVL93Zrw132s\n",

"GSujWKXm1xMJfL33CunZmgEDHycrXh3ahiHtnXSm/1jaDtCuhQ1bX+pdq0YC13MKmbjiCDHXc/Fs\n",

"Zslvz/e4y/CgMg5FXWfK6uPlMlY/TA1ka0QKf51OwtPBku2v9EEhl/HnqUSW7o3Sim83tzFj1kAv\n",

"Jga6NDqb2OSMfD7edoHtZ1MBcLAy5e0RbXnEv3ol9wfhp6Nx/Ofvc1iaKNg9r1+DUNTIKijmxyNx\n",

"rD4Yy43cIkCjIFFqt9nH24GF43xvD5I9oFtZWlYB13OKDPkna3GwMsG0gn7ZstJe5QNa+V2tC6FX\n",

"rrH+SByezSzZO6+fcNITGJRqB51z585FqVSydOlSZDIZqampNG/evNxjvvjiC0JCQtiyZUuVj9tQ\n",

"gs5S/jyVyOu/R6BUS/TysmfF5IBy8jqCmnEtu5DuC/eiUkvsmdevWr2WarXE5vBkFu2O1GboXJqa\n",

"M2+ID2M6O+s8KLyZW0S/z4PJLlDyxQQ/Hg1w0enxKyMzv5jHvzvKhZQsnJuYs+mFHtUOPkoF+Ut5\n",

"uFMLtkakIJfB7y+Wt9YrUqrZdDKBb/ZFaYcvnJuYM3ugF48GuNSJaenaJDTyGh9sLl9y/++YjrRr\n",

"of+Su1otMWHlEU7G3WJwOye+nxLQYIKM/CIVv4UlsDIkupwcEqC3zO617EJ2nEvh95OJRNyRdbU0\n",

"UTC4vRNudhb8fSaJhJt3u5OZGcsZ3M4JhVxWEtiq7zJ3qE23st1zDd9jLmjcVCvozM3NpUWLFiQm\n",

"JmJjU/kHaLt27Vi4cCFjx46t8kIaWtAJmi+fF386SW6RinYtbFg7LQinKjhwCO7N9LUn2HspnRf7\n",

"t+aN4W3v+/hSbcDPd13WClM7WJny0kAvHuvqqteM3MqQaBbuuERzGzOCX+2vd8H4vCIlU344Tljc\n",

"LRysTNn0Qo8a+T1LksSrmyL441Riue0v9GvNmw9V/G9eqFSx8UQCy4KjtNaHrnbmvDTQm3H+zrUi\n",

"c1VXuLPkrpDLmNKjFXOH6L/kHpmWzcilByhWSayY3IXhHVvo9Xy1TZFSzT9nkvg2JJqYMj2Wwzo4\n",

"8cHoDrSw1U92Nzkjn+1nUyqx4WzGQx1bYKSQsTUihX2X0rWVAnNjBSM7tWBSkCuBrZpWehNQ6laW\n",

"eCuPqWuOa4PYcf7OPBrooh0mq6lbmb2lCWue7iqMTAQGpVpBZ0REBKNHj+axxx5jz549mJub88EH\n",

"H5QrrR8+fJhx48aRmJiIkVHFAwuFhYUUFhaW2/buu+/y1Vdf1fDPqLucS8rk6TUnuJ5TiHMTc9Y9\n",

"07Va2TnB3ew4m8KLP5+iuY0Zh94ceM8M5bGYG3y26zIn424BYG1mxAv9WjOtl3ulAzW6pKBYxaAv\n",

"Q0jKyNd7T1WhUsWz68I4cOU6NmZGbHy+xwNl1wqKVbR9d6f2dx8nK7a81Pu+QXpBsYpfjsWzfH+0\n",

"Vh/R3d6Clwd56yWjXJdJysjnfwYouX+x6zLfBEfhaG3Knvn9arW3tLZQqSW2n03hpQ2ntdsUchmP\n",

"dnHhhf6ta3SzVVXuZ8PZ3dOOW3nF/H0mqVxg7OlgyYRAV8YHON9Tw7dQqRkw+vOUZsDoyW5ufDC6\n",

"Q6OrGggaHtUKOk+dOkVAQADr1q1jypQpnD59miFDhnD+/HmcnDQ2W9OnT8fe3p7PPvus0uN88MEH\n",

"fPjhh+W2de/enSNHjtTwz6jbxN/Q3LnGXs+liYUxq6YEEuhetV5Xwd0UKlV0/d9eMvOLWf9MV/r6\n",

"3C1Mfi4pk893XSakRHja1EjO073cebFfa5pYmNz1eH3yz5kkXvn1DJYmCva/NkAvEkNKlZqXNpxm\n",

"x7lUzI0V/PRsNwJaNb3/E+/DM2tPsO9SOgBbX+pNR+eqT/PnF6n46WgcK0Kitb14ns0seWWQNw93\n",

"atmogs87S+5d3e34cEwHvZXcC4pVPPTVAWKv5/JU91Z8NLajXs5TF4i7kUu/z/eX2yaXwQjfFrzY\n",

"vzUdWtZMgaKqlNpwbolIIfb67QDTytSIIe2daNnEjOSMAnadTyWvpA9VIZcxoI0jk4JcGdCmWYVV\n",

"AEmSWBkaw6c7LyFJGges5U92qfXPL4FAl1Qr6Lx+/TpOTk4UFRWhUGiyHUFBQSxcuJDBgweTk5ND\n",

"ixYtOHHiBG3bVl72bEyZzlJu5hbxzNoTnEnIwNRIztLH/RnWofn9nyiokFILxjGdW/LVY7c9p2Ov\n",

"5/Llv5fZGqHRTzSSy5gU5MrLg7wN1tqgVks8svwQ4YmZehFTV6slXv8jgt9PJmKikLP66SCdCU2X\n",

"WumN7+LClxP9anSM3EIl64/EsTI0mow8jTC3t6MVcwb78FDH5o1G3aFQqWLVgVi+2Vc7JffDUdd5\n",

"YtUxZDL4/YWeOrkJqav8FpbA679HAOBkY6pt7wAY0KYZMwd4EaTnG/2yNpxbI1K0w3WgcTfq490M\n",

"uQyu3sgjPCFDu6+ZtSnjumicj1pX4Ey0+0Iac349TW6RCnd7C1ZNDRLVMkG9pdqDREOHDmXOnDmM\n",

"GDGC2NhYgoKCCA8Px9nZmR9++IE1a9Zw8ODBai+kIfZ03kl+kYrZv5xi76V05DL4cExHnnpA2Z/G\n",

"SnhCBmOWHcLUSM6J/wwmr1DFV3uv8FtYgraXarRfS+YN8cFdj2W2qnIs5gaTvjuKQi5j5yt9dNbM\n",

"L0kS/916gTWHrqKQy1j2RBeGd9Tdzcyi3ZEs3XtFJ9my7IJi1h2+ynehMVqJqrbNrZkz2IdhHXSn\n",

"GlDXScrI5+OtF9hx7nbJ/Z2RbRnbWfcl91c3hfP7yUTaOFmz9eXeDbY8K0kSL/50ip3nU2ndzJLP\n",

"J/ix9tBVtkYka4dzurrbMXNAa/r5NNP7a+1eNpwOVqa0aW5FfpGKqzfyuJl7e1I+yL0pEwNdGdmp\n",

"Rbn2n4spWTy7LoykjHyszYxY9kSXCis8AkFdp9pBZ0xMDNOnT+f69evI5XLee+89xo8fD0DPnj2Z\n",

"MWMG06ZNq/ZCGkPQCZoy6Lv/nGPDcY0m26wBrXl1aJtG84WrKyRJYujiUK6k52BjZkShUq21FBzY\n",

"1pFXh7YxiED3vXhufRj/XkhjUFtHftCRYHypfSXAlxP8GK/jCfnSQahxXZxZNLGzTo6ZmV/M6oOx\n",

"rD4YS3aJI0yHljbMG+LDwLaOjea9EFJSco8tU3L/79gOtG2uu9ftrdwiBi0K4WZuEa8Na8OsAV46\n",

"O3Zd41ZuEcOWhJKeXai9Sbp6PZeVodH8fjJR6yrUoaUNM/t7Mbxj81pp8Shrw7njXKo22w/gaG2K\n",

"hYmCvCIV13MKtQGypYmCUX4tmRjkir9rE2QyGddzCnnhx5OExd1CLoN3H27P0z3dG837RdAwEOLw\n",

"BkCSJJbujWLxnkgAxndx4ZPxvg02C6EPcguVdFuwt5yNXZB7U14f3lbvZbSaUlYw/pdnu9HzAQXj\n",

"fzgYy0clskYfjGrP03qQjPnxaBzv/n2O4R2as+KpAJ0eOyOviFUHYllzKFaruejnYsvcIT61ko2q\n",

"C5SW3L/ed4WCYjUKuYypPdyZM8RbZyX3P08lMu+3cEyM5Pw7p2+dyPzri9DIa0xZfRyANU8HMaCt\n",

"IwCpmQWsOhDDz8fita5jng6WvNCvNWP9nWtNR/leNpwWJgoKleq7HJ28Ha2YFOTKI/7OWJkZ8faf\n",

"57SqEo93deO/Y8SAkaD+IIJOA/Lr8Xje+fscKrVEX59mfPtkFyxN9T9RXZ8pVGomo5cFR5UTcH5/\n",

"VP2463//n3OsOxJH+xLB+Jr2M/52IoHX/9D0sM0f4sNLg/QzFV8asPTxduDH6d30co6buUV8FxrD\n",

"usO3bUi7uDVh3pA29PKyr/PXVBck3srj460X2XleU3JvZm3KOyPaMaZzywf++yVJ4qkfjnMw6jq9\n",

"vOz5aXq3Bv1v+uGW86w5dBUHKxN2zulbzhThVm4Raw9fZe3hq2TmazKOLWzNeK6vJ48Fueld0qws\n",

"BcUq9l9OZ0t4CnsvpVFQrL7n440VMga3c2JioCuXUrP5bJdmwKi7px3fPhlAU0sxYCSo+4ig08Ds\n",

"vZjGrF9OUVCsxtfZltVPB+llurm+o1JL/HkqkSV7rmgb9FvZWxB3QyPy/tJAL+YPbWPIJVaJm7lF\n",

"9PssmOxCZY3L4dvPpjD7l1OoJZjRx4O3R7TTWxCx81wqL/x0koBWTfnjxZ56OUcp13MKWRkSzfoj\n",

"cdpWia7udswd4kOP1vZ6PXdd4a6Su4cdH43pSJvmD9YDHHcjl6GLQylUqlk00Y9xXWrHqMAQFBSr\n",

"GP3NQSLTchjczpHvpwTe9f7IKVTyy7E4Vh2I1bqS2Vma8Ewvd57q4Y6tee1KTOUUKtl7MY0t4cmE\n",

"RF7TtgJURnMbM5pamnAxJQvQfBb+MDUQL0ch/C6o24igsw5wOv4W09eFcTO3CDc7C9Y901WvGnP1\n",

"CUmS2HU+jS/+vUxUeg6gmU59eZA3EwNd2XkulZc2nMa5iTkHXh9QLyahV4RE88mOS7SwNWPf/OoJ\n",

"xodEXuPZdScoVkk8FuTKwnG+es1aHbhyjad+OE7b5tbsnNNXb+cpS3pWAd+GRPPzsXiKSoLPHp72\n",

"zBvqU2dbJ3RJRSX3p3u6M2ew9wO5mi0LjuLzXZdpamHM3vn9sWvAmbGLKVmM+eYQRSo1Cx7x5Ylu\n",

"bhU+rqBYxR+nElkREq0VY7cyNWJy91ZM7+1hkARAZl4xu86nsiUimUNR16vsUmSskPH9lED6t3HU\n",

"7wIFggdABJ11hJhrOVoXCjtLE1Y/HURn1yaGXpZBORR1nc92XdbKi9iaG/Ni/9ZM7eGuDdQKilUE\n",

"/W8P2QVKnfRJ1gZlBeOrM9xx4upNnvrhGAXFakZ2asHSx/z1PghxKv4W45YfxtXOnAOvD9True4k\n",

"NbOA5fuj+PV4AkUqTfDZx9uBOYN9GrT8TymJt/L4aOsFdp1PAx685F6sUvPw0oNcTst+IAms+sKq\n",

"AzF8vO0i5sYKtr3cG88K5IhKUarUbDubwvLgaC6nacTeTY3kTApyZUYfT1ztLGpr2eW4nlPIjrMp\n",

"bAlP4fjVm1V6zjh/Z76c6NegWygE9RcRdNYhrmUXMm3tcc4lZWFurGDZk/4MbOtk6GXVOuEJGXy2\n",

"6xKHom4AGhu56b09mNHXs8Ky19t/neWXY/GM83dm0aTOtbzamlFdwfhzSZk8/t1RsguV9G/TjO+e\n",

"CqyV4YfLqdkMWxKKvaUJJ98dovfzVURSRj7LgqP47UQCypK0T/82zZg72Ae/RnBjtv9yOh9sPs/V\n",

"klaSBym5n4q/xfhvDyNJ8POz3ehVD27SaopaLfHU6mMcirpBJxdb/nix530HbtRqib2X0lkWHMWZ\n",

"kptdhVzGmM4tmdm/tUHL1ymZ+WyLuNuGszLeGdGORwNcRK+noE4hgs46Rk6hkpk/nyI08hoKuYwF\n",

"j3RkUlDFpaGGRlR6Nl/sitQOUxgrZDzZrRWzBnjdMygrzcaZGys48Z/BWNWDYSy1WmLs8kNEJGYy\n",

"ubsbH4+tXDA++loOE1cc4UZuEV3d7Vj3TNdaG3hIuJlHn8+CMTOWc+mjh2rlnPdayzf7ovj9VKJ2\n",

"wndwO0fmDPapllNSfaRQqeL70Bi+CY7Sltyn9XTnlRqU3EuNFdztLdg5py9mxrU3PFPbpGTmM3zJ\n",

"ATLzi5k9wItXh1Wt71uSJI7E3GB5cDQHo64DIJPB0PZOzOzvZfCbncpsOCvi4RLf916tHepF+5Gg\n",

"YSOCzjpIsUrNG39EaH135w724eVBXg22XJJ4K48le67w56lE1JLmw/0Rf2fmDvapUllLkiQGLQoh\n",

"5lounz3aiYmBrrWw6gfnaMwNHisRjN81p0+FWZSkjHwmfHuY5MwCOjrb8MuM7rXqo30zt4guH+0G\n",

"IHrBiDphXRl3I5ele6P463Sitt9tWAcn5g7x0anGZV3kzpK7o7Up74xsx2i/qpfcswuKGbwohLSs\n",

"wmoFYvWVbREpzPrlFHIZbHy+R7X7gsMTMli+P0r7bw6aNo8X+7emh6fh1RWupGWzpSQALWvDeSfO\n",

"Tcx5NMCFCYEuuDQ1TLuAQCCCzjqKJEl88e9llgVHA/B4V1c+GtOxQo/e+sr1nEKWBUfx89F4bc/e\n",

"0PZOvDqsDT7VdOwpHZLo6mHHb8/30Mdy9cKM9WHsrkQw/lp2IRNXHiH2ei6tm1ny2/M9sLeq3cGG\n",

"gmIVbd/dCcDZD4Y+0CCLrom+lsPSvVfYHJ5M6afYyE4tmDPIW2eOT3WV4MvpfFim5N7Nw46Pxnas\n",

"8vtm57kUXvjpFEZyGdte7vPA0/F1nfm/hfPHqURcmpqz/ZU+Nbpxu5KWzbch0fxzJlmbafd3a8Ks\n",

"/l4MbOto8CxiWRvOlaExlT5OJoPeXg5MDHRlSHunBp3pFtQ9RNBZx/nxyFXe23weSdKUEr9+vEut\n",

"asnpg6yCYlaFxvDDwdui4D087XlteBu6uNVsQCQlM5+en+xDkiD0tQG42dePO/noazkMq0AwPjOv\n",

"mEnfHeFSajbOTcz5/cUetLA1r/X1SZKE1zs7NK4qbw8ymH/9vbiSls2SvVfYFpECaL5UR/u15OVB\n",

"3hV6WTcUCopVrDpQs5K7JEk89+NJdl9II6BVUzY938PgQZM+yS4oZsTSAyTczH9gd62Em3l8FxrD\n",

"xrAErbpCGydrZg5ozUjfFnUiMVDamzpjfdg9H9fEwpixnTW+73XNwU3QMBFBZz1g57lUXvn1NIVK\n",

"NZ1dm7D66aB6KXdSUKzixyNxLNsfpbWC83W25fXhbejt5fDAZaqnfjjGgSvXeWWQN3OH+OhiybVC\n",

"qWB8h5Y2bJndm/xiFU/9cIxT8Rk0szZl0/M9DOoi4/vBLrILlOyb3++eE8CG5lJqFkt2X9H2BMtl\n",

"MNbfmZcHejdoF56Em5qS+78XqldyT87IZ8iiEHKLVHw8tiOTu7eqrSUbhLCrN5m48ghqCb55wp+H\n",

"O7V8oOOlZxew+uBVfjoap3UWcrOz4Pl+nozv4lInMohFSjVv/3WW308m3vexvs62TAxyZbRfy1rX\n",

"KRU0HkTQWU8Iu3qT6evCyMwvxsPBkvXPdDWYjEd1UarUbDqZyFd7rpCaVQCAZzNLXhvahuEdm+us\n",

"J6p0ItzVzpyQV+uHZifAjZxC+n++n+xCJZ+M82VrRAoHo65ja27Mxue7G7xPscfCvaRkFrBldm98\n",

"Xer+wM65pEyW7LnCnouaIEwhlzG+izMvDfSuN++ZmhBcMuUeV42S+5pDsXy45QLWpkbsmd+vTmay\n",

"dcmX/17m631R2JgZsWtuX51UDzLzi/nxyFVWH7rKzVyNS5qjtSnP9vHgiW6tDD7YKEkSPxyMZcH2\n",

"i9oe6AFtmnHi6q1yNpylmBrJeahjcyYGudLdw77efI4K6gci6KxHRKVnM3X1CZIy8nGwMmXttKA6\n",

"PbWrVktsP5fCl/9GahvcW9qaMWewD+O6OOu8DJVfpNHszClU8utz3enuWX9cbL7dH82nOy9pf7cw\n",

"UfDzs93wr2G7gS4Z9OV+oq/l1rt/04jEDBbvjiT48jUAjOQyJgS6MnugF85Nar9VoTYoKL495V6o\n",

"VGMklzGtlzuvDPapMPhRqSXGLT9EeGImI3ybs/zJAAOsuvYoVql59NvDhCdm0rO1xhJUV0FVXpGS\n",

"jScS+C40hpRMzc21rbkxT/d05+me7gaXLgq+nM5Lv5wmp1CJq505y58IICkjny0Ryey9WLENp5ud\n",

"BRMDXXg0wJXmtg37hkRQO4igs56RllXA1NXHuZSajaWJgm8nB9DXp5mhl1UOSZIIibzG57sucz5Z\n",

"Y9NmZ2nCrAFePNnNTa9lpzf/iODXEwlMCHDh8wn1R/w6v0hFu/d2an+vS0L3o785SERiJqufDqyX\n",

"urGn4m+xeHckB65opG+MFTIeC3Jj1gCvBvtFmnAzj/9uvcDukpK7k40pb4+ouOR+ITmLUd8cRKWW\n",

"WDUlkMHt6981rg4x13IYufQg+cUq3hnRjhl9PXV6/CKlmr9PJ7EiJJqYkpttCxMFT3R149k+ngZ9\n",

"zV1Jy2b6ujDib+ZhZWrE0sc7M7CtE7mFSvZcTGNLeAohkel32XDKZdDXpxmTAl0Z1M6pVjSCBQ0T\n",

"EXTWQ7IKinl+/UmOxNzASC7js0c71Rkv5ZNxN/l052WOx2rcM6xMjXi2jwfTe3vUyuRz2NWbPLri\n",

"CBYmCk68MxjLeqDZKUkSH265wNrDV7Xbwv4zGIdanlSvjMe+O8LRmJt8/bg/o/werA/OkJy4epPF\n",

"uyM5HK0xHTAxkvNEVzdm9m+NYwMtKwdfSueDLbdL7t097fjvmLtL7gt3XGRlSAwtbc3YPa9fvXjf\n",

"PAi/HIvn7b/OYqKQ8/esXnoZolGpJXaeS2VZcBQXSjzSTRRyxgc483zf1gbrM76ZW8SLP53kWOxN\n",

"ZDJ4+6F2PNvHQ3szkplXzK4LqWwJT+Zw9A3tpH4p9pYmPOLvzKQg1wavEiHQPSLorKcUKlW8timC\n",

"zeHJALwxvC0v9PM0mGbcpdQsvth1mT0X0wHNF/qU7q2YOcCrVoeeJEliwBf7uXojjy8n+DE+oG4E\n",

"4/di0b+XWbovqty2p7q34qOxHQ20ovJMX3uCvZfS+XS8b4MwKjgSfYPFuyO1toKmRnKe6t6KF/q3\n",

"rjOBvi4pKFbxXWgMy8qU3J/p7cHLg7y1Jff8IhVDl4SQcDOfZ3p58N6o9gZetX6RJIkZ60+y52Ia\n",

"Pk5WbJ7dW28VmNLKz/LgaO1rTi6Dhzu15MX+rWnXovZ7touUat7ffI4NxxMAmBDgwsePdMTUqPy/\n",

"wfWcQnac0wSgpYmEsnR2bcKkIFce7tSiTsmpCeouIuisx6jVEgt3XOT7A7EATO3RivdGdahVAe/4\n",

"G3ks2n2Zf0q0EuUymBDgyiuDvWlpoL65r/de4cvdkfRsbc8vM7obZA1V5fvQGP63/SIAH43pgJej\n",

"NY9/f2/B+NrmpQ2n2RKezHsPt+eZ3h6GXo5OkCSJw9E3+PLfy5yKzwA0dqtTerbi+b6t66U6xP2o\n",

"qOT+zsj2jOrUAplMRkjkNaauPo5cBn/P6kUnlyaGXbCeuZFTyLAlB7ieU8i0Xu68P6qD3s954upN\n",

"lgdHafuMAQa1dWTmAC8CWtVu/7YkSaw5dJWPt11ALUGQe1NWTA6oVAtYa8MZkUJ4iUVoKebGCkaW\n",

"OB8FtmpqcMF8Qd1FBJ0NgFUHYvh4myZweahjcxZP6qx3uY70rAK+3hfFhuPxWj/skb4tmDfUx+Da\n",

"iIm38uj9aTAAB98YUGfdN349Hs+bf54F4LVhbZg1wAuAZ9eFsediGoPbObJqatC9DlErlPbJvjrU\n",

"h9kDvQ29HJ1SmoVavDtS62dtaaJgWi8Pnu3jQROLhhd87ruUxgebLxB/U1Ny7+Fpz3/HdMDbyZpX\n",

"fj3NP2eSad/Chs2ze9UJzUl9Enw5nWlrTgCw/pmutdYffy4pk29Dotl+NkVrbNDNw45ZA7zo4/3g\n",

"8nHVYX/JgFF2oRKXpub8MDXovmYB8Tfy2BKRXKENp6eDJRMCXRkf4IyjdcNsWxHUHBF0NhC2hCcz\n",

"/7dwilRqurrb8f2UQGwtdF/uyMwrZkVoNGsOxWqnHft4O/D6sLZ1Sk7nie+Pcjj6BvOH+PDSoLoX\n",

"KG2NSOalDaeRJHi+nydvDm+r/aKJvpbD0MWhqNQSv8zoRs/Whh0o+mjrBX44GMsL/Vrz5kNtDboW\n",

"fSFJEvsupbNod6R2+M3a1IhnenvwTG+PBqdbWFnJ/cluboz+5hCZ+cW8PaItz/Vtbeil6p1SL/pm\n",

"1qbsmtO3VrPcMddyWBkSw5+nE7XDO77Otszs35phHZrXmlxRVLpmwCjuRh6WJgqWPu7PoHZVGyir\n",

"zIZTIZcxoI0jj3d1rfKxBA0fEXQ2IA5HX+f59SfJLlTi7WjF2me66kwaJr9IxZrDsazYH01WgUbb\n",

"zd+tCa8Pa0uP1nVPRuePk4nM3xSOu70Fwa/2r1PlnuDL6Ty3PoxilcTjXd1Y8EjHu9ZX+kXY0dmG\n",

"zbN6G1Qrr7TndEqPVvx3TN3oM9UXkiTx74U0Fu+O1GZwbMyMmNHHk6d7uTe4vrWEm3l8uOWCVtPU\n",

"ycYUHydrDly5jrmxgn/n9m3Q2qag+Wwb9c1BotJzGNbBiRWTA2r98yIlM5/vQ2PZcDye/GKNS1vr\n",

"Zpa82N+LMZ1bYlwLGedbuUW8+PNJjsZoBozeHN6W5/pWfU5Aa8MZkczW8BSSMvK1+1ZMDmB4x+b6\n",

"WrqgHiGCzgbGpdQspq4+TlpWIU42pqyd1vWBGtWLlGo2nohn6b4ormUXAuDjZMWrQ9swpL1TnQrm\n",

"ypJXpCTo4z3kFqn4/YUeBLrbGXpJAByPvcmU1ccoKFYzyq8lSyZ1rrAH90ZOIf0+309OoZLFk/x4\n",

"xN9wA1ErQqL5ZMclxndx4cuJ9UeG6kFQqyV2nk9l8e5IrqTnABrLwOf6ejK1h3uDm+7eezGND7fc\n",

"LrmX0s+nGWunBdXZ97muOJeUySPLD1GskvhsfCcmBrkaZB03c4tYeyiWtYevam/unZuY81xfTyYF\n",

"ueq9bapYpea9f86z4Xg8AI8GuPC/CgaM7odaLXE6IYMt4clEpmXz8diOddrNTFB7iKCzAZKUkc/T\n",

"q49zJT0Ha1MjVk4JqHaJVq2W2ByezKLdkdovIpem5swb4sOYzs61OqxUU17bFM6mk4k8FuTKJ+M7\n",

"GXo5nEvK5PHvjpJdqGRgW0dWPhVwzwzG8v1RfLbzMi1tzdj3an+D2er9eOQq7/5znoc6NufbyQ1b\n",

"PPxOVGqJbWdTWLInkphrmtKhnaUJL/Tz5Knu7pibGN7qUFcUFKtYGRLD8v2aknspn4zz5bGu9V+1\n",

"4H6U3lxZmCjY/nIfg1qnZhcU8/OxeFYdiOV6juZm38HKhGm9PHiqRyts9JhxlySJtYev8tFWzYBR\n",

"YKumrHgqoEEqOwhqn4bdJd5IcW5izqYXehDk3pTsQiVPrz7BlhJppfshSRJ7LqQxYukB5mw8Q/zN\n",

"PBysTPlwdAf2ze/PuC4u9SLgBLRySVsjUsgvUhl0LVHp2UxZfZzsQiXdPOxY/mSX+5bMnunlQUtb\n",

"M5IzC1h9KLaWVno3FiaarF6ugf8NDYFCLmO0X0t2z+3H4kl+uNtbcDO3iAXbL9Hns2B+OBhLQXHD\n",

"+HcxM1bwymBv9szrx+AyPXhv/nmWn47GUUfyE3pjRh9PunnYkVekYs7GMyhVdzv01BbWZsa80K81\n",

"B98YwEdjO+LS1JzrOUV8vusyvRbu47Odl7TBqK6RyWRM6+XB2mldsTYzIizuFmO+OcSl1Cy9nE/Q\n",

"uBBBZwOliYUJP07vxvAOzSlSqXlpw2lWHYi553OOxtzg0RVHeHZ9GJdSs7E2M+K1YW0Ifb0/U3u6\n",

"1zsXiq7udrjamZNTqOTfC6kGW0fCzTwmrzrOzdwiOrnYsmpqYJWylmbGCl4b3gaA5cHR3NDTl8z9\n",

"sDTVrDWvAp/mxoJCLuMRfxf2zOvH5492wtXOnOs5hXy09QJ9Pwtm3eGrFCobRvDpamfBqqmBrJjc\n",

"RbvtP3+f48lVx4hKz77HM+s3CrmMRZM6Y21mxJmEDL6+QzvXEJgZK3iqeyuCX+3P4kl+eDtakV2o\n",

"ZPn+aHp9so8PNp8v1zupS/r6NOOvmb1wt7cgKSOf8csPa+W2BIKaUr+iCEG1MDNWsOzJLkzt0QqA\n",

"j7dd5OOtF1Df4TBxLimTqauP89h3RzkZdwtTIznP9/PkwOsDmDXAS5vpqm/I5TLGlfRC/n4y0SBr\n",

"SM8qYPIPx0jNKtAMd03rWq1hlDF+znR0tiGnUMmSPVf0uNLKKb3+OY046CzFSCFnQqAr++b355Nx\n",

"vjg3MSc9u5D3N5+n/+f7+eloHEVKw2XIdMnwji34cXpX7e+Ho28wfMkBFm6/SG4DfS04NzHn4xJT\n",

"hm+CozgZd8vAK9JgrJDziL8Lu+b0ZeVTAfi52FKoVLP28FX6fRbMq5vCiSrpPdYlXo5W/D2rFz1b\n",

"25NbpOK5H8NYERLd4LPeAv0hejobAZIksTI0hk92XAJglF9LvpjQiaRb+Xy5O5JtESkAGMllTApy\n",

"5eVB3jg1EFvA+Bt59P08GJkMDr85kBa2tSdYn5FXxKSVR7mclo2rnTmbnu9ZI9/lw9HXeeL7YyWC\n",

"8X3xcqzdhvyTcbcY/+1h3OwsCH19QK2eu65TqFTxW1giy/ZFkZpVAGgCl5cHeTGui0utTB3rm7f+\n",

"jNA615TS3MaM/zzcjpG+LRrkkFGpXqmbnQXbX+mjdW6qK5SaGywLjtLauspkMLxDc2b299K5fF2x\n",

"Ss0Hm8/z8zHNgNG4Ls4sHOdb7QEjgUAEnY2IP08l8vrvESjVEp7NLIm7kaf11R3TuSVzB/sYtHle\n",

"X0xceYTjsTfLCbDrm9xCJU+uOsaZhAwcrU35/YWeuNnXXHrm2XUn2HMxncHtnFg1NVCHK70/l1Kz\n",

"GL7kAA5WJoT9Z0itnru+UFCs4tfj8SzbH61VeXCzs+DlQd6M7dyyXousZ+YVM2hRCNdzCunkYsut\n",

"vCISbmpKur287PlwdMdavxHSN5n5xYz46gBJGflMDHThs0frrmrD6fhbLN8fXa703denGbP6t6ar\n",

"h51ObwrWH7nKh1suoFJLdHFrwsqnAmlmLQaMBFWn/n4SCqrNuC4urJkWhKWJgphruajUEgPbOrL9\n",

"5T589Zh/gww4QSP7AfDHqcRaKQsVFKuYsT6MMwkZNLEw5sfp3R4o4AR486F2KOQy9lxM40hJZqO2\n",

"sCwdJCpsGD2L+sDMWMHTvTw48PoA/jOyHQ5WJsTfzOPVTeEMWRzK36eTtDd49Q1bC2PeL/Fiv5SS\n",

"zYrJAcwZ7I2JkZxDUTd46KtQFu5oWCV3W3Njvpzoh0wGv4UlsvNciqGXVCn+bk35fkogu+b05RF/\n",

"jbJIaOQ1Jn13lEdXHGHfpTSdfe5N6eHO2mlBWJsZcSo+g7HLDnEhWQwYCaqOyHQ2Qi4kZ/FbWAIj\n",

"O7UgqI7oV+qTnEKNZmd+sYo/Z/aki5v+PI6LVWpm/nyK3RfSsDRR8MuM7vi5NtHJsd/9+xw/Ho3D\n",

"19mWf2b1qjXB+Bs5hQR8vAeA6AUj6o16gSHJK1Ly45E4VoREcyuvGNCIfc8Z7MNI3xYGFfuvCZIk\n",

"MW3tCfZfvkZXDzt+ndGdxFv5fLjlPHsvpQOakvu7D7dnhG/zBlNy/3TnJb7dH00TC2N2zelbL9qO\n",

"4m/ksTI0mk0nE7X9xW2bWzNzgBcjfVvo5P0bfS2HZ9eFEXs9FwsTBUsmdWZoByH+Lrg/1c50FhYW\n",

"Mnv2bLy9vfH19WXy5Mn33C6oe7RvacMHozs0ioATwMrUiIdK3DD0OVCkVku8/nsEuy+kYWIkZ9XU\n",

"IJ0FnACvDPbGytSIs0mZbK6iBJYuKCuEnt9A5IH0jYWJEc/3a82BNwby2rA22JobE30tl5c2nOah\n",

"rw6w42zKXQN9dRmZTMZHYzpibqzgeOxNNp1MwM3egh+eDmLVlEBc7cxJzSpg1i+neOqH43oZajEE\n",

"cwf70NHZhoy8Yl7dFF4vrpmbvQX/e8SXg68P4Pm+nliaKLiUms3LG04z8Mv9bDge/8BKC62bWfHX\n",

"zJ708rInr0jF8z+dZPn+KDFgJLgv1Q4633zzTWQyGZGRkZw9e5YvvvjintsFgrpAaYl9S3iyXnQV\n",

"JUnigy3n+et0EkZyGd8+2UXn9qAOVqa82F/jhf35rsu1pg9paiSnNDnSmGWTaoKVqRGzBnhx8I0B\n",

"zBvig7WZEZfTsnnx51OM/Pog/55PrTdf1K52Fswb4gPAgu2XtL2rg9s7sXtuP14ZpCm5H4y6zkNf\n",

"hfLJjkv1vuRuYiRnySR/zIzlHLhynbWHrxp6SVXG0caMt0a04/Cbg5g3xIcmFsbE3cjjrT/P0vez\n",

"YFYdiHmg69PEwoS107ryVPdWSBJ8tvMy838LbzC6tQL9UK3yem5uLi1atCAxMREbG5v7bq8Oorwu\n",

"0CdqtUSfz4JJysjn68f9GeXXUqfH/2LXZb4JjkImgyWTOjOms7NOj19KQbGKAV/sJyWzgDeGt9UG\n",

"ofrG9/1dZBcq2Te/n7CzewAy84v54WAsqw/GaiWofJ1tmTvEmwFtHOt8WVqpUjNm2SHOJ2cx2q8l\n",

"Sx/3L7c/7kYuH265wL6SknsLWzP+M7L+l9xLXblMjORsmd2bNs2tDb2kapNbqGTDcY3LUanSQhML\n",

"Y6b19GBqz1Y0sTCp8bF/PHKVD0oGjPzdmrDyqQAcret+K4Kg9qlWpjM6Oho7OzsWLFhAYGAgffr0\n",

"Ye/evZVur4zCwkKysrLK/ahU4u5IoD/kchnjumgCwT9O6bbEvjIkmm+CNULSH43pqLeAE0oE44eV\n",

"CsZH1ZpgfGmJPa8RuhLpEltzY+YN8eHgGwOYNaA1FiYKziZl8szaMMYuP0xI5LU6nfk0UshZOM4X\n",

"uQw2hyez/3J6uf2t7C1ZXVJyd2lqTkpmwyi5T+7eigFtmlGkVPPKr6frpRGApakRz/bxJOR1jcas\n",

"u70FGXnFLN4TSa9P9rFg+0XSS4LR6vJUD3fWTeuKjZkRp+MzGPvNIc4nZ+r4LxA0BKoVdCqVSuLi\n",

"4mjfvj1hYWEsXbqUSZMmkZ+fX+H2tLSK3QsWLlyIra1tuZ/jx4/r5A8SCCpjXBdNiT008hppNfxw\n",

"vZMNx+NZWKJ/+sbwtkzu3konx70XYzs706GlDdmFSr7aWzuC8RYlrkT1vVxaV2hiYcJrw9pyoKTv\n",

"zsxYTnhCBlNXH+fRFUc4FHW9zgafnVya8HRPD0DjVJRXdPdrYnB7J/bM68fLDaTkLpPJ+OxRP+wt\n",

"TbiUms0Xuy4bekk1xtRIwWNd3dg7vz9fP+5P2+bW5Bap+C40ht6fBvPOX2eJv5FX7eP29nbg71m9\n",

"8HSwJDmzgEe/PcLOc4ZzghPUTaoVdLq5uSGXy3nyyScB8Pf3x8PDg4SEhAq3nz17tsLjvPXWW2Rm\n",

"Zpb76dq1a4WPFQh0hYeDJYGtmqKW4O/TSQ98vM3hybz9l+Y1/mL/1rVW6pbLZbwzsh0APx+LJ/qa\n",

"/jNIpbJJItOpW+ytTHlrRDsOvD6Q6b09MDWSczLuFk+uOsak745yLKZ25bGqyvyhPrS0NSPxVj5f\n",

"VeKUZWasYN4QH3bP7cuANs0oVkmsCIlm8KIQtp9NqbNBdWU0szbl0/GdAPj+QCyHoq4beEUPhkIu\n",

"Y5RfS3a80oc1TwcR0KopRSo1Px+LZ8CX+5nz62kup1bP9tSzmRV/zexFby8H8otVvPDTSZYFiwEj\n",

"wW2qFXQ6ODgwaNAgdu3aBUBsbCyxsbH06NGjwu3t2rWr8DimpqbY2NiU+1EohLOBQP+UDhT9fvLB\n",

"NDv3XUpj3sYzSBJM7u7G6yUl79qiZ2sHBrdzRKWWtE5T+sTCpCTTWUFWS/DgNLM25d2H2xP6+gCe\n",

"7umOiULO8dibTPruKE+uOsrJuJuGXmI5LE2N+O8YjV3kqoOx9yyllpbcvy9Tcp/58ymmrD5eKzdM\n",

"umRweyee6OYGwPzfwsnIKzLwih4cmUzGgLaO/P5CDzY+152+Ps1QqSX+PpPMsCWhPLsujFPxVbcD\n",

"tbUwZu20IK398ue7LjN34xkxYCQAaqDTGRMTw/Tp07l+/TpyuZz33nuP8ePHV7q9qohBIkFtkFVQ\n",

"TNDHeyhUqvlnVq8aSRodjbnB1NXHKVSqGdO5JYsndjaI7mJUejbDlhxApZb49bnudPfU7bR8WZ5Z\n",

"e4J9l9L5bHwnJga56u08Ag0pmfksC45i44kEilWaj+i+Ps2YO9gbfz3qzFaXmT+fZPvZVPxcbPlz\n",

"Zq/7akAWFKtYvj+aFSHRFCnVGCtkPNvHk5cGemFhUresJisjr0jJw0sPEnM9l5G+LfjmCf96PSRV\n",

"EeeSMlm+P4od51IpjRB6eNoza4AXvbzsq/z3/nQ0jvc3n0ellujs2oTvpogBo8aOEIcXNDpKfZWn\n",

"9GilzdZUlYjEDJ74/hg5hUoGt3Pk28kBBvXX/s/fZ/npaDydXGz5e6b+BONn/3KKrREpvD+qPdN6\n",

"eejlHIK7SbyVx7LgKDaFJaIs0Ygc2NaRuYN9dO6vXRPSsgoY/GUI2YXKar02rl7P5cMt5wm+fA2A\n",

"lrYaYfnhHevHlHtEYgbjlh9GqZb4coIf40sqKA2N6Gs5rNgfzV+nk7SvPz8XW17s78XQ9k5V+rw5\n",

"HHWdF38+RWZ+MS1szfh+SiAdnQ3/2hUYBmGDKWh0jC8ZKPrnTHK1plCvpGUzdfVxcgqV9PC055sn\n",

"uhg04ASYM9gHK1MjIhIz2RKhP8H421aYorxem7g0tWDhuE7sm9+fCQEuKOQy9l1KZ9Q3B5mxPszg\n",

"E8JONma88VBbQCMblpyRX6XnuTvcLrk7NzEnObOAF+tRyb2TSxPmDPYG4P3N50m4Wf3Bm/pA62ZW\n",

"fD7Bj5CStg8zYznhiZm88NNJhi0J5c9TiRSr1Pc8Rk+vkgGjZpakZBYwYcWROm0rKtAvIugUNDp6\n",

"eTnQ3MaMzPxi9l1Mv/8TgISbeUz+4Ri38orxc7Hl+6mBmBkbvg+5rGD8Zzv1JxhfKpmUKwaJDIKb\n",

"vQWfT/Bjz7x+jPN3Ri6D3RfSGLn0IC/+dLLaAx+65ImubgS0akpukYr3/jlf5V5pmUzGkNIp94Fe\n",

"mCg0AuzDl4Ty2c5LFU7F1yVe7O9FYKum5BQqmbvxDMr7BF/1Gecm5nwwugMH3xjIrAGtsTYz4kp6\n",

"DvN+C6f/5/v58cjVe372eDhY8tfMXvTxLh0wOsXXe6+IAaNGiAg6BY0OhVzGIyWanVWxxUzPKuDJ\n",

"VcdIyyrEx8mKtdO6YmVad/rPnunlQQtbM5Iy8vXmmGJZIpkkHIkMi4eDJYsmdebfuf0Y7dcSmQx2\n",

"nEtl+FehzP7lFFHptR98yuUyFjzii5Fcxp6Laew6Xz2ZHHMTBfOGtuHfuX3pXzLlvnx/NIO/DGFH\n",

"HZ5yV8hlLJ7UGStTI8LibvHt/mhDL0nvOFiZ8tqwthx6cyCvD2+DvaUJSRn5vPvPeXp/Gsy3+6PJ\n",

"Liiu8Lm25saseTqIp3u6A/Dl7khe+VUMGDU2RNApaJSUltj3R17T2vlVxK3cIib/cIz4m3m42Vnw\n",

"0/RuNLWsuXOHPjA3UfDqUM30/LJ9+hGMLx3yEJnOuoGXoxVLH/dn15y+jPRtgSTB1ogUhiwOZc6v\n",

"p4mp5RJ1m+bWvNBPk3F/f/N5sioJPO6Fu4Mla54O4runAu4qudf231NVXO0s+O+YDgAs2XuFMwkZ\n",

"hl1QLWFjZszM/l4cfGMgH47ugHMTc67nFPLpzkv0/GQfX/57ucLPISOFnA9Gd+B/j3TESC5jc3gy\n",

"k747WmNRekH9QwSdgkaJl6MV/m5NUKkl/jlTsWZnTqGSp9ccJzItBycbU35+thuONnVz8vIR/9uC\n",

"8Uv1IBivzXTW8ZJnY8PHyZplT3Zhxyt9GNreCUmCv88kM3hRCK9uCq+RyHdNmT3QC3d7C9KyCvl8\n",

"Z83E02UyGUM7NGfPvH68VKbkPmxJKJ/vqpsl90f8nRnZqQUqtcTcjWfq5Br1hbmJgqk93dn/Wn++\n",

"mOBH62aWZBco+XpfFL0+3ceHW85X2Of7ZLdWrJ/eFVtzY8ITMhj9zSHOJQkHo8aACDoFjZbSbGdF\n",

"mp0FxSqeXXeC8MRMmloY89P0brjaWRhimVVCLpfxzgj9CcZrM52FItNZF2nXwobvpgSyZXZvBrV1\n",

"RC1pXtcDvtzPm39EkHhL/8GnmbGCBY/4AvDTsThOxlVd2/FOzE0UzB/ahl1z+9LPR1NyXxasKbnv\n",

"PFe3Su4ymYwFY31pYWtG7PVcPtp60dBLqnWMFXIeDXBh99x+rJjcBV9nWwqK1aw5dJV+nwfz+u/h\n",

"d2Wre7Z24J9ZvWjdzJLUrAIeXXGYHWfFgFFDRwSdgkbLqE4tMTGScyk1m/PJWdrtxSo1s385xdGY\n",

"m1iZGrHuma54O1kbcKVVo6eXA4PaOqJUS3yqY8F4SxOR6awP+LrY8sPTQfw9qxf9SkS+fz2RwIAv\n",

"9vPOX2erPF1eU3p6OTC+iwuSBG//efa+k833w8PBkrXTglhZpuT+wk+nmLrmRJ0qudtaGPPlBD9k\n",

"Mo017u4LFVtAN3TkchnDO7Zg8+xe/Di9K9097ShWSfwWlsigRSHM+vlUuYymu4Mlf83qRV+fZhQU\n",

"q3nx51N8tUcMGDVkRNApaLTYWhgzpL0TcHugSK2WeHVTOHsupmNqJGfV1EA6uTQx4Cqrx1sj2qKQ\n",

"y/j3QppOLRQtSganckSms17Q2bUJ657pyh8v9qC3lwPFKomfj8XT//P9vP/POdL02EP3zsh2NLUw\n",

"5nJaNt+Fxjzw8WQyGcPuKLmHRl5j+JIDdark3tPLgRl9PAF4448I0rMbb5+iTCajj3czfn2uB3+8\n",

"2JPB7RyRJNh2NoWHvz7I02uOczxW47JlY2bM6qmBTOvlDsDiPZG8LAaMGiwi6BQ0akptMTeHJ1Ok\n",

"VPPe5nP8cyYZI7mMbyd30avLjz7wcrTmsRLHoAXbL6JW6yZjYCV6OuslAa3s+OnZbmx8rjvdPOwo\n",

"UqlZdySOvp8F898tF/QSGNlZmvDuw+0BWLr3Clev5+rkuGVL7n19mlGkUrMsOJohi0LZeS61TmTH\n",

"5g/1oW1za27mFvH67xF1Yk2GJqBVU1ZNDWLnnD6M6dwSuQz2X77GxJVHmLDiMMGX01HIZbw/qgML\n",

"x2lUELaEJzNp5RG93hwJDIMIOgWNmj5eDjSzNuVmbhFTVh/jp6PxyGSweFJnBrZ1MvTyasScwT5Y\n",

"migI16FgvOjprN9087Rn4/M9+GVGNwJbNaVQqWb1oVj6fhbMgu0Xda548Ii/M7287ClUqnnn77M6\n",

"Db48HCxZNy2IFZM1JfekjHxe+OkkU9ecIFZHAW5NMTVSsPRxf0yM5Oy/fI0fj8YZdD11ibbNbfjq\n",

"MX+CX+3P413dMFHIOXH1FtPWnGDk0oNsjUhmYqArP07vRhMLY8ITMxn9zUEiEjMMvXSBDhFBp6BR\n",

"Y6SQM85fo9l5NEZT7lnwiC+j/FoaclkPRDNr3QvGlzoSiUxn/aZnawc2vdCDH6d3pbNrEwqK1XwX\n",

"GkOfz4L5dOclbuUW6eQ8MpmM/431xdRIzqGoG/x1umKFiAc5/vCOmpL77AG3S+7DFofyxa7L5BtQ\n",

"2svHyZq3Slya/rftokG0U+syrewtWTjOlwNvDGBGHw8sTBRcSMli9i+nGbwohPibufz+Qg+8HK1I\n",

"yypk4sojbNWj25qgdhFBp6DRU9Y3+e0RbXm8q5sBV6Mbpvf2pLmN7gTjLbTldZXOSvYCw1Dab/fX\n",

"zJ6smRZEJxdb8opUfLs/mj6fBfPlv5fJzKu+zuaduDtY8vIgjVXkx9suclNHAW1ZzE0UvDqsfMn9\n",

"m+AoBi8KMWjJfWoPd/p4O1CoVPPKr2coUjZct6Ka4mRjxjsj23PojYHMGeyNrbkxsddzeeOPszz1\n",

"w3FGdWpJVw87CorVzP7lNEv2RIp2hQaATKojV3HevHksWrTI0MsQNFI2hSUgk8m0PZ4Ngd9PJvLq\n",

"pnCsTY0IeX0Adg8gap9fpKLdezsBOP/hMK0tpqD+I0kSey+ms2h3JBdSNCoO1mZGPNvbk2m93bEx\n",

"M67xsYtVah5eepDLadmM7+LClxP9dLXsu5AkiV3n0/ho6wWSSqb0+/k044PRHfBwsNTbeSsjLauA\n",

"4UtCuZVXzAv9WvNmSfZTUDE5hUo2HIvn+wMxpJcYdtiaG5NfpKKoRAVhZKcWfPGoH+YmhrcgFtQM\n",

"kekUCIAJga4NKuAEGOfvTPsWuhGMNzOWI5Np/j9XlNgbFDKZjMHtndj6Um9WTO5CGydrsguULN4T\n",

"SZ9Pg1kWHEVODe1PjRVyFozzRSaDP04lcjjquo5Xf5vSkvvueX2ZNaA1Jgo5IQYsuTvZmLFwXCcA\n",

"VoZGcyRad2oSDRErUyNm9PXkwBsDWPCIL252FmTmF2sDToBtESlM+u4IqZliwKi+IoJOgaCBIpfL\n",

"+M9IjWD8T0fjHkjXUCaTafs6xTBRw6RUY3HHK3345gl/vBytyMwv5vNdl+nz6T5WhETXqKc3oFVT\n",

"JndrBcDbf53VuxSOhYkRrw1ry845fejj7VCu5L7rfO2W3Id3bM6kQFckCeb/dobM/AdvW2jomBop\n",

"eKKbG/vm9+OrxzrT5g6N5IiSAaPwRmI52tAQQadA0IDp6eXAwFLB+J0PJhhfaoWZW8Osl6B+IJfL\n",

"eLhTS3bN6ctXj3XG08GSW3nFfLLjEn0/C2bVgZhqZw1fG94GR2tTrt7I45t9UXpaeXk8m1mx/pmu\n",

"rJjchZa2mv7m5388ybS1J3Qm41QV3hvVnlb2FiRnFvDu3+dq7bz1HSOFnDGdndnxSh9WTQnE362J\n",

"dl96tmbAaEu4GDCqb4igUyBo4Lz1UFvkMth1Pk0ryFwTbk+wi0xnY0AhlzGmszP/zu3LlxP8cLOz\n",

"4HpOER9vu0jfz4NZcyi2yllLGzNj/jumAwArQqK5nFo7E92aknsL9szvx6wBrTFWyNh/+RpDF4fy\n",

"5b+1U3K3NDVi8aTOKOQyNocn888Z3U7yN3Tkck37x58v9mTDjO708XYAoFCp5qUNpzl4RX8tGwLd\n",

"I4JOgaCB4+1kzWMlE/n/23ahxtPnpRPsoqezcWGkkDM+wIW98/vx2fhOuDQ151p2IR9uuUD/z/fz\n",

"45GrFCrvH7wN69Ccwe2cUKol3v7rbK2qIJSW3HfN6astuX+9T1Ny/7cWSu5d3Jry0kAvAP7z9zkS\n",

"b+Xp9XwNEZlMRo/W9vw4vRubZ/dieIfmOFiZiKGieoYIOgWCRsCcwd5awfitZ1NqdIxSgfg80dPZ\n",

"KDFWyJkY5Mq++f1Z8IgvLW3NSM0q4N1/zjPg8/38ciz+ntJAMpmM/47pgKWJgpNxt/jleHwtrl5D\n",

"acn92ydvl9yf+/Ekz9RCyX32AC/83ZqQXaBk3m/hqIT0WI3p5NKEFU8FEPafIQS0amro5QiqgQg6\n",

"BYJGgKO1GS/00wjGf7rjUo2GOSxNRKZTACZGcp7o5kbwa/35aEwHnGxMSc4s4O2/zjLwy/38diIB\n",

"pari4LNlE3NeHdYG0LwODWFzKJPJeMhXU3Kf2V9Tcg8uKbkv0mPJ3UghZ8mkzliaKDgee1MnvvQC\n",

"QX1DBJ0CQSPh2T6eONmYkpSRz7oaCMZbmJZmOkXQKdBMGT/Vw52Q1wbw/qj2OFiZkngrn9f/iGDQ\n",

"ohD+PJVYYfA5pYc7fi62ZBcq+XDLeQOsXIOFiRGvD2/LzjIl96V6Lrm3srfk/dGa3tZFuy9zLilT\n",

"5+cQCOoyIugUCBoJ5iYKXh2qyTJ9ExxVbYeY25lOUV4X3MbMWMG0Xh4ceH0A/xnZDntLE+Ju5DHv\n",

"t3CGLgnlnzNJ5UrJCrmMBeN8UchlbD+byp4LaQZcPbQuU3JvcUfJPe6G7kvuEwJcGN6hOcUqiVd+\n",

"PW1Qy06BoLYRQadA0IgY18VFIxhfUH3B+FIXIiGZJKgIcxMFz/bRiHu/MbwtTSyMibmWyyu/nmH4\n",

"klC2RaRoh4c6tLTl2d4eALz3zzmDv6ZKS+575/fjxTIl9yF6KLnLZDIWjvPF0dqU6Gu5LNh+UWfH\n",

"FgjqOiLoFAgaEQq5jHfKCMbHVmN4QkgmCaqChYkRL/ZvzYHXB/DqUB9szIy4kp7DrF9OMWLpAa0n\n",

"+iuDvXFpak5yZgFf/htp6GUDmrW/UbbkrtSU3IcsDmH3hTSdldybWprwxQSNJeiPR+MIvpSuk+MK\n",

"BHUdEXQKBI2MXl4ODGjTTCMYv6PqgvEWQhxeUA2szYyZPdCbg28OZM5gb6xNjbiUms0LP53k4a8P\n",

"cjjqBh+P7QjA2sOxRCRmGHbBZSgtuS8vKbkn3spnxvowpq8L01nJva9PM6b1cgfgtd/DuZ5TqJPj\n",

"CgR1GRF0CgSNkLdGtEMug53nUzlxtWqC8SLTKagJNmbGzBnsw8E3BvLSQC8sTRScT87i2fVhLNod\n",

"iXMTc9QSvPnH2Uqn3g2BTCZjhG8L9sy7XXLfdyldU3LfHakTO883hrfFx8mK6zlFvPlHRK1adAoE\n",

"hkAEnQJBI8THyZpJQRrB+I+3XazSl52FkEwSPAC2FsbMH9qGA28M5MX+rTE3VhCRmElSRj4AF1Ky\n",

"WHPoqmEXWQGWppqS+45X+tLbq6TkvvcKQxaHPPAQlJmxgq8e88dEIWfPxXSDaJcKBLVJtYPOwsJC\n",

"Zs+ejbe3N76+vkyePBkAd3d32rRpQ+fOnencuTMbN27U+WIFAoHumDvEGwsTBeEJGWyJuL9gvBgk\n",

"EugCO0sT3hjelgNvDOC5vp6YGd/+Glq0O1IbhNY1vByt+HH67ZJ7ws18nl0f9sBT7u1a2PD6cI2q\n",

"xEdbLxB9LUdXSxYI6hzVDjrffPNNZDIZkZGRnD17li+++EK7b+PGjZw5c4YzZ84wadIknS5UIBDo\n",

"luoKxmszncKRSKADHKxMeXtEO0JfH8AzvTwwMZKTX6ziUkqWoZdWKWVL7i/0a42R/HbJffEDlNyf\n",

"6eVBLy97CorVzN14huI61GYgEOiSagWdubm5/PDDD/zvf/9DJpMB0Lx5c70sTCAQ6J9n+3hoBePX\n",

"H7l6z8dalYrDi/K6QIc4Wpvx3qj2HHh9AOuf6crAto6GXtJ9sTQ14s2HNFPupSX3rx6g5C6Xy/hi\n",

"gh+25sZEJGby1Z7qyZkJBPWFagWd0dHR2NnZsWDBAgIDA+nTpw979+7V7p8yZQq+vr5Mnz6da9eu\n",

"VXqcwsJCsrKyyv2oVCJ7IhDUNhYmRlrB+K/3RXHrHoLxpd7rQhxeoA+cbMzo69NMm9CoD5SW3Jc9\n",

"0YXmNrdL7tPXniD+Rl61jtXC1pwFj/gCsHx/VJUH/ASC+kS1gk6lUklcXBzt27cnLCyMpUuXMmnS\n",

"JNLS0ggNDSUiIoJTp07h4ODA1KlTKz3OwoULsbW1Lfdz/PjxB/5jBAJB9RnXxYV2pYLx+yrPsFiW\n",

"SCYJG0yB4DYymYyRnTTC8s/388RILmPvpXQGLw5hyZ7qldxHdmrB+C4uqCWYu/EMWQXFely5QFD7\n",

"VCvodHNzQy6X8+STTwLg7++Ph4cHZ8+exc1NMwlrbGzMnDlzOHDgQKXHeeutt8jMzCz307Vr1wf4\n",

"MwQCQU1RyGW8M0IjGP/jkcoF40sznXnFKq2zjEAg0GBpasRbD7Vj55w+9GxtT5FSzZI9mpL73otV\n",

"L7l/MLo9rnbmJN7K54PNhvOmFwj0QbWCTgcHBwYNGsSuXbsAiI2NJTY2lnbt2pGRkaF93IYNG/D3\n",

"96/0OKamptjY2JT7USgUNfsLBALBA9Pb24H+JYLxn+2sWDC+NNMpSVCgFCV2gaAivByt+fnZbnzz\n",

"hL+25D59XRjPrqtayd3azJjFEzsjl8Gfp5LYGpFcC6sWCGqHak+vr1ixgs8//xxfX1/Gjh3LypUr\n",

"KSwsZMCAAXTq1AlfX19CQkJYv369PtYrEAj0xFsPaQTjd5xLJayCfjIzIwWl7XY5osQuEFSKTCbj\n",

"4U4ty5Xc91ysesk90N2OWQO8AHj7z7OkZNZNGSmBoLrIpDpigTBv3jwWLVpk6GUIBI2at/6MYMPx\n",

"BDq7NuGvmT3vGuro8N5OcotU7H+1P+4OlgZapUBQv4hKz+a9f85zOPoGAG52Fnwwuj0D2zpV+pxi\n",

"lZpHvz1MeGImPVvb89P0bsjl9WfISiCoCOFIJBAItMwd7IOFiYIzCRlsrUAwXisQL2STBIIqU1py\n",

"//pxf5xsTIm/mcczazUl94SbFZfcjRVyFk/qjLmxgsPRN/jhYGwtr1og0D0i6BQIBFocbcx4vm+J\n",

"YPzOSxTe0btpaSr81wWCmiCTyRjl15K98/vzfN8yJfdFIXy150qFJXfPZla8+3B7AD7fdZkLyXVX\n",

"OF8gqAoi6BQIBOWY0VcjGJ94K5/1h+PK7bvtSiQynQJBTbAyNeKtEe3Y8UofenjaU6hUs3hPJEMX\n",

"h7Lv0t1T7o93dWVwOyeKVGrmbDxdY9cjgaAuIIJOgUBQDgsTI+ZrBeOvlBOMtzQRmU6BQBd4O1nz\n",

"y4yKSu5h5UruMpmMT8f74mBlSmRaDp/sqFhdQiCoD4igUyAQ3MX4Li60bW5NVoGSr/dFabdbmIpM\n",

"p0CgKyouuafdVXK3tzLl8wmdAFh7+CohkZU7/gkEdRkRdAoEgrtQyGW8M7JEMP7oVa6WCMaXZjpF\n",

"0CkQ6I7KSu7DloQSfCkdgAFtHJnSoxUAr24K5+Y9LGsFgrqKCDoFAkGF9PFuRj+fZhSrJD7bpSnp\n",

"aXs6RXldINA5pSX3pY/742htStyNPKatPcGM9ZqS+1sPtcPL0Ypr2YW8+UcEdUTxUCCoMiLoFAgE\n",

"lfL2CI1g/PazqZyMu1lmel1kOgUCfSCTyRjt15J9r/bnuZKS++4LmpL79wdi+HR8J4wVMv69kMam\n",

"sERDL1cgqBYi6BQIBJXSprk1EwNdAfh428Uy0+si0ykQ6BMrUyPeHtGO7a/0obunHYVKNYt2RzLv\n",

"tzMEtrID4IMt57WtLwJBfUAEnQKB4J7MG+KDubGC0/EZ2gEGkekUCGoHHydrNszozlePddaW3I/E\n",

"aJyN8opUzNl4BqVKbeBVCgRVQwSdAoHgnjjamPF8P08AzpeIU4ueToGg9pDJZIzp7Mze+f2Y0ccD\n",

"RRk7zDMJGeUUJgSCuowIOgUCwX15rq8njtam2t/zxPS6QFDrWJsZ887I9uwoKbmX8vW+K4QnZBhu\n",

"YQJBFRFBp0AguC8WJka8WiIYD6KnUyAwJHeW3NUSnIy7ZehlCQT3xcjQCxAIBPWD8QEurD4Uy6XU\n",

"bHJFT6dAYFBKS+4D2zpyMu4WPVs7GHpJAsF9EZlOgUBQJRRyGf8Z2R65DBysTO//BIFAoHeszYzp\n",

"38YREyPxdS6o+4hMp0AgqDK9vR3YNacvjtZmhl6KQCAQCOoZIugUCATVwtvJ2tBLEAgEAkE9ROTj\n",

"BQKBQCAQCAR6RwSdAoFAIBAIBAK9I4JOgUAgEAgEAoHeEUGnQCAQCAQCgUDviKBTIBAIBAKBQKB3\n",

"RNApEAgEAoFAINA7IugUCAQCgUAgEOgdEXQKBAKBQCAQCPSOCDoFAoFAIBAIBHpHBJ0CgUAgEAgE\n",

"Ar0jgk6BQCAQCAQCgd6RSZIkGXoRAOPGjcPd3d3QyxDoAJVKxfHjx+natSsKhcLQyxHoEXGtGw/i\n",

"WjcexLVuPNTkWrdq1YpXXnmlRuerM0GnoOGQlZWFra0tmZmZ2NjYGHo5Aj0irnXjQVzrxoO41o2H\n",

"2r7WorwuEAgEAoFAINA7IugUCAQCgUAgEOgdEXQKBAKBQCAQCPSOCDoFOsfU1JT3338fU1NTQy9F\n",

"oGfEtW48iGvdeBDXuvFQ29daDBIJBAKBQCAQCPSOyHQKBAKBQCAQCPSOCDoFAoFAIBAIBHpHBJ0C\n",

"gUAgEAgEAr0jgk5BlXB3d6dNmzZ07tyZzp07s3HjRgCuXLlCz5498fHxISgoiPPnz2ufU9N9gtrl\n",

"5Zdfxt3dHZlMxpkzZ7Tb9XFtxXU3LJVd68re3yCudX2koKCAsWPH4uPjg5+fH0OGDCEqKgqA9PR0\n",

"hg8fjre3Nx07diQ0NFT7PH3sE+iXe13r/v374+HhoX1fL168WPs8g11rSSCoAq1atZJOnz591/YB\n",

"AwZIa9askSRJkjZt2iQFBgY+8D5B7RISEiIlJCTcdY31cW3FdTcslV3ryt7fkiSudX0kPz9f2rZt\n",

"m6RWqyVJkqSvv/5a6tevnyRJkjRt2jTp/ffflyRJko4fPy45OztLRUVFetsn0C/3utb9+vWT/vrr\n",

"rwqfZ6hrLYJOQZWo6EspLS1Nsra2loqLiyVJkiS1Wi05OTlJV65cqfE+geEoe431cW3Fda87VDXo\n",

"FNe6YXDixAmpVatWkiRJkqWlpZSSkqLdFxQUJO3evVtv+wS1S9lrfa+g01DXWpTXBVVmypQp+Pr6\n",

"Mn36dK5du0ZCQgItWrTAyMgIAJlMhpubG/Hx8TXeJ6gb6OPaiutet7nz/Q36eR0Iap+vvvqKMWPG\n",

"cOPGDYqLi2nevLl2n7u7O/Hx8XrZJ6h9Sq91KW+++Sa+vr5MmjSJmJgYAINeaxF0CqpEaGgoERER\n",

"nDp1CgcHB6ZOnWroJQkEAh0h3t8NlwULFhAVFcXChQsNvRSBnrnzWv/4449cunSJiIgI+vTpw8MP\n",

"P2zgFYqgU1BF3NzcADA2NmbOnDkcOHAAV1dXUlJSUCqVAEiSRHx8PG5ubjXeJ6gb6OPaiuted6no\n",

"/Q36eR0Iao8vvviCP//8kx07dmBhYYG9vT1GRkakpqZqH3P16lXc3Nz0sk9Qe9x5rUHz/gVNpWH2\n",

"7NnExMRw48YNg15rEXQK7ktubi4ZGRna3zds2IC/vz+Ojo506dKFn376CYA//vgDFxcXvLy8arxP\n",

"UDfQx7UV171uUtn7G/TzOhDUDosWLWLDhg3s3r2bJk2aaLdPmDCBFStWAHDixAmSkpLo16+f3vYJ\n",

"9E9F11qpVJKWlqZ9zB9//IGTkxP29vaAAa91lbs/BY2W6OhoqXPnzpKvr6/UsWNHafTo0VJsbKwk\n",

"SZJ06dIlqXv37pK3t7cUEBAgRUREaJ9X032C2uW5556TnJ2dJYVCITk6OkqtW7eWJEk/11Zcd8NS\n",

"0bW+1/tbksS1ro8kJCRIgOTp6Sn5+flJfn5+UteuXSVJkqTU1FRpyJAhkpeXl9S+fXtp37592ufp\n",

"Y59AuIQOgQAAALVJREFUv1R2rXNycqSAgACpY8eOUqdOnaSBAwdKZ86c0T7PUNdaeK8LBAKBQCAQ\n",

"CPSOKK8LBAKBQCAQCPSOCDoFAoFAIBAIBHpHBJ0CgUAgEAgEAr0jgk6BQCAQCAQCgd4RQadAIBAI\n",

"BAKBQO+IoFMgEAgEAoFAoHdE0CkQCAQCgUAg0Dsi6BQIBAKBQCAQ6B0RdAoEAoFAIBAI9I4IOgUC\n",

"gUAgEAgEekcEnQKBQCAQCAQCvfN/cNf4GgFX7EMAAAAASUVORK5CYII=\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-f30d8e38-72b7-441d-a9b1-cc153c4698fb\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-f30d8e38-72b7-441d-a9b1-cc153c4698fb\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"from matplotlib import pyplot as plt\n",

"\_df\_37['Weight(Pounds)'].plot(kind='line', figsize=(8, 4), title='Weight(Pounds)')\n",

"plt.gca().spines[['top', 'right']].set\_visible(False)"

],

"text/html": [

" <div class=\"colab-quickchart-chart-with-code\" id=\"chart-399f2843-fd22-4188-a806-0fc30842e23a\">\n",

" <img style=\"width: 180px;\" src=\"\n",

"bGliIHZlcnNpb24zLjcuMSwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy/bCgiHAAAACXBIWXMAAA9h\n",

"AAAPYQGoP6dpAADFi0lEQVR4nOyddXgcdf7H3+uRlbi7a93bJJXUsBaXIgUKLVDkuDvgfhyHHBxy\n",

"wAHFSoGW4l4o1FJNm7rH3T3ZrCVZn98fszvZTTZpNtn49/U8edrMzM58k6y85yPvD4uiKAoEAoFA\n",

"IBAIBMIIwR7pBRAIBAKBQCAQJjZEkBIIBAKBQCAQRhQiSAkEAoFAIBAIIwoRpAQCgUAgEAiEEYUI\n",

"UgKBQCAQCATCiEIEKYFAIBAIBAJhRCGClEAgEAgEAoEwohBBSiAQCAQCgUAYUYggJRAIBAKBQCCM\n",

"KESQEgiECYtQKMThw4f7ffzChQvxz3/+c0DX+uabb3D11VcP6LHDRUlJCVgsFioqKq547FtvvYW1\n",

"a9cO+ZoIBMLEgAhSAoEwJti0aRP8/PxgOe344MGDYLFYeOmll6yOveGGG7BmzZornlOlUmHhwoUO\n",

"W+Phw4fBYrGg1+uttqvVavztb3/DK6+8wmxbu3YteDwehEIhRCIRoqOj8dprrzlsLUPNxo0bsW/f\n",

"Ppw9e3akl0IgEMYBRJASCIQxwdKlS9HY2Ijs7GxmW0ZGBpKSkrB//35mm8FgwKFDh7Bs2bKRWKZN\n",

"vv32WwQFBWHKlClW22+99VaoVCooFAp8+OGHePHFF7Ft27YRWaO9CAQC3Hnnnfjf//430kshEAjj\n",

"ACJICQTCmCAuLg4hISHIyMhgtmVkZOCFF17AuXPnoFKpAABnzpyBTCZDeno6Tp06hYULF8LT0xOh\n",

"oaF47rnnrKKXLBbLSsxu3boVUVFREIlEuOGGG7Bx48YeEVSlUok77rgDEokEwcHB+OijjwAAVVVV\n",

"WLlyJQDAzc0NQqEQ//nPfwAAP//8M5YvX97rz8ZisbB06VIkJibi3LlzAIATJ04gJSUF7u7uCA8P\n",

"xzPPPAONRtPr2isqKsBisVBSUgIA2LZtG4KCgrB582aEhYVBIpHg5ptvhkKhYB5TWlqKJUuWQCwW\n",

"Iz4+HocOHbJa16VLl5CWlgY3Nze4u7tj+vTpKCwsZPavWLECO3fu7BERJhAIBHshgpRAIIwZli5d\n",

"ygjS1tZW5OXl4aqrrsLUqVOZWtCMjAwkJCRApVJhyZIl2LBhAxobG5GZmYnff/8dr7/+us1zZ2Zm\n",

"YsOGDdi0aRNkMhnWrVuHzz//vMdx27Ztw7p169DW1oZ33nkHGzduRElJCUJCQrB7924AgEwmg0ql\n",

"wv/93/8BAM6ePYukpKRefy6j0Yh9+/YhJycHs2bNQlVVFdLT03HjjTeisbER+/btw86dO/H000/b\n",

"9ftqaGhAQUEB8vPzUVBQgIsXL+Ktt94CQEeSr732WoSEhKC+vh4ZGRnYsmWL1eMffvhhLFmyBC0t\n",

"LWhubsZnn30GNzc3Zv+kSZOgVCpRUFBg17oIBAKhO0SQEgiEMcOyZcuQmZkJjUaDAwcOYM6cOXB2\n",

"dkZ6ejojVDMyMrBs2TJ88MEHuPbaa3HbbbeBy+UiNDQUTz31FLZu3Wrz3Nu3b8eqVauwcuVKcDgc\n",

"XHXVVbjqqqt6HHfjjTdi8eLFYLPZuPHGG+Hh4cFENXtDKpVCIpH02P7DDz/Azc0N3t7eePLJJ/HK\n",

"K6/grrvuwtdff42YmBg88cQT4PP5iI6Oxssvv4xPPvnEqob2SnC5XLzxxhtwdnaGv78/Vq9ejdOn\n",

"TwMATp48icLCQrzzzjtwdXVFUFAQnnvuOavH8/l8VFVVobKyElwuF1OmTIGvry+z3/wzSaXSfq+J\n",

"QCAQbEEEKYFAGDMsWbIEGo0GWVlZyMjIQHp6OrM9IyMDKpUKJ0+exNKlS1FcXIxff/0Vbm5uzNdD\n",

"Dz2EhoYGm+eura1FaGio1bawsLAexwUEBFh97+rqCqVS2ee6PTw8IJfLe2y/5ZZbIJPJ0Nraipyc\n",

"HPz1r38FAFRXVyMyMtLq2KioKHR2dqK5ubnPa1ni5eUFHo9nc601NTVwd3e3Esrh4eFWj9+2bRtY\n",

"LBYWL16MoKAgPPHEE0xpBADmZ/Lw8Oj3mggEAsEWRJASCIQxg6enJ6ZNm4aMjAwrQTpnzhxUV1fj\n",

"q6++AovFQlpaGvz8/HDHHXdAJpMxXwqFwkpQWRIYGIjKykqrbd2/vxJstu231OnTpyM3N7ff5wkO\n",

"DkZZWZnVttLSUjg7O8Pb2xsAbVnV3t7O7K+rq7NrrUFBQWhra7MSyt3tnkJDQ7FlyxZUVlbi8OHD\n",

"yMjIwKuvvsrsz87OhlAoRFxcnF3XJhAIhO4QQUogEMYUy5YtwxdffAG5XI4ZM2YAAHg8HlJSUvDS\n",

"Sy9h3rx5cHV1xcMPP4yffvoJP/74I7RaLQwGA0pKSrBnzx6b573rrrvw22+/Ye/evTAYDNizZw92\n",

"7dpl19r8/PwAwKrxB6BtqPbu3dvv89xxxx0oLCzEpk2boNVqUVpaiueeew7r1q0Di8UCAMyYMQPb\n",

"tm2DWq1GY2MjXnzxRbvWOnv2bERHR+PJJ59Ee3s7amtr8fLLL1sds23bNtTU1ICiKIjFYnC5XHC5\n",

"XGb/nj17cM0111htIxAIhIFABCmBQBhTLFu2DPX19Vi0aJFVRDI9PR319fVYunQpAGDmzJlMo05g\n",

"YCA8PT1x00039Rr1TEtLw4cffoiHH34Ybm5u2Lx5M9asWQMnJ6d+ry0mJgaPPvooFi1aBDc3N8ZX\n",

"dM2aNaiqqsLFixf7dZ7Q0FDs27cP33//PXx8fLB48WKsXLkSb7zxBnPMBx98gIaGBnh5eWHp0qW4\n",

"6667+r1OgK4v3blzJ8rLy+Hv74/09HTcf//9VsccOnQIs2bNglAoxOTJkzF37lymsUqr1eLLL7/E\n",

"k08+add1CQQCwRYsyp4KeQKBQJhArF69Gr6+vti8efOgz/X111/jm2++wZ9//umAlY08b7/9Ni5d\n",

"uoQvvvhipJdCIBDGAUSQEggEgomff/4ZS5cuhbOzM3755ResWbMGBw8eRGpq6kgvjUAgEMY1pPCH\n",

"QCAQTOzcuRMPPPAAtFotQkND8fnnnxMxSiAQCMMAiZASCAQCgUAgEEYU0tREIBAIBAKBQBhRiCAl\n",

"EAgEAoFAIIwoRJASCAQCgUAgEEYUIkgJBAKBQCAQCCPKmBCk77777kgvgUAgEAgEAoEwRIwJQWrv\n",

"PGkCgUAgEAgEwthhTAhSAoFAIBAIBML4hQhSAoFAIBAIBMKIQgQpgUAgEAgEAmFEIYKUQCAQCAQC\n",

"gTCiEEFKIBAIBAKBQBhRiCAlEAgEAoFAIIwoRJASCAQCgUAgEEYUIkgJBAKBQCAQCCMKEaQEAoFA\n",

"IBAIhBGFCFICgUAgEAgEwohCBCmBQCAQCAQCYUQhgpRAIPQbiqLw8h95+OJ4xUgvhUAgEAjjCO5I\n",

"L4BAIIwdato68emxcgDAtBB3JAdJRnhFBAKBQBgPkAgpgUAYEK/vKRjpJRAIBAJhnEAEKYFA6DcC\n",

"btdbxrGSFhwtbh7B1RAIBAJhvEAEKYFA6Dd8rvVbxut7CmA0UiO0GgKBQCCMF4ggJRAI/cZSkPK5\n",

"bOTUKvBHdv0IrohAIBAI4wEiSAkEQr/hc7reMu6cHQoAeHNvIbR640gtiUAgEAjjALsE6WOPPYaw\n",

"sDCwWCxcvHiR2R4WFobY2FhMmTIFU6ZMwffff8/sKy4uxrx58xATE4OZM2ciNzfXYYsnEAjDC5fD\n",

"BptF//+uuaHwEgpQJe3Ad2eqRnZhBAKBQBjT2CVIb7rpJhw7dgyhoaE99n3//fe4ePEiLl68iFtv\n",

"vZXZvn79ejz44IMoKirC008/jbVr1w560QQCYeQwp+25bBYeT48GALx3oBgqjX4kl0UgEAiEMYxd\n",

"gjQ1NRVBQUH9Pr6pqQlnz57FnXfeCQC48cYbUV1djZKSEvtWSSAQRg3mtL1Gb8RtM4MR5umCFpUW\n",

"nx4tG+GVEQgEAmGs4rAa0rvvvhvJycm4//770dxMW8FUV1fD398fXC7tv89isRASEoKqqt7TexqN\n",

"BgqFwurLYDA4apkEAmGQ8LkcAIBWbwSPw8bflscCALZklqFFpRnJpREIBAJhjOIQQZqZmYnLly/j\n",

"/Pnz8PLywj333DPgc7366quQSCRWX6dPn3bEMgkEggMwe5FqDXQj01VJ/pgUJEG71oD3D5LsB4FA\n",

"IBDsxyGCNCQkBADA4/HwxBNP4OjRowCA4OBg1NfXQ6+na8soikJVVRVzvC3+8Y9/QC6XW33NmjXL\n",

"EcskEAgOwFxDau6sZ7NZeHpFHADg61OVqGrtGLG1EQgEAmFsMmhB2t7eDplMxnz/7bffYurUqQAA\n",

"Hx8fTJs2DV999RUA4Oeff0ZQUBCioqJ6PZ9AIIBYLLb64nA4g10mgUBwEOYaUkurp/lRXkiJ9oLO\n",

"QOGtjMKRWhqBQCAQxih2CdL169cjKCgINTU1WL58OaKiotDY2IhFixZh0qRJSE5OxpEjR7B9+3bm\n",

"MZs3b8bmzZsRExOD1157DVu3bnX4D0EgEIYPJkLarbbbHCX97WIdcmrlw74uAoFAIIxduPYcvHnz\n",

"ZpvbL1y40OtjYmNjceLECftWRSAQRi3dU/ZmkgIluG5yAH6/VIfX9xTgy/tnj8TyCAQCgTAGIZOa\n",

"CASCXVjaPnXnb8tiweOwcLS4BVklLcO9NAKBQCCMUYggJRAIdtFbhBQAQjxdsMY0UvS13QUwGqlh\n",

"XRuBQCAQxiZEkBIIBLvgd7N96s7GxVFw5XOQXSvHrpz64VwagUAgEMYoRJASCAS76CtCCgBeQgEe\n",

"SI0AALy5txC6XoQrgUAgEAhmiCAlEAh2IbBh+9SddSkR8BLyUdHage/OVA/X0ggEAoEwRiGClEAg\n",

"2MWVIqQAIBRw8diSaADAu/uL0a7RD8vaHA1FUShsUOL9g8VY9UEWpry0DxerZSO9LAKBQBh32GX7\n",

"RCAQCFeqITVz28wQfHq0HFXSDnx2rJwRqKMdncGIM+VSZOQ3Yn9+I6qlncw+DptFShAIBAJhCCCC\n",

"lEAg2IWtSU02j+Oy8bflsXjs2wv4JLMMa2aHwFMoGI4l2o28U4cjRc3Yn9eIQ4VNUKqtI7psFrBq\n",

"SiAeWRSFKB/hCK2SQCAQxi9EkBIIBLswR0ht+ZB255pkf3ySWYqcWgXeP1SC569NHOrl9ZtqaQf2\n",

"m6Kgp8qk0NuwqOKwWbh+Ki1Ew71cR2CVBAKBMDEggpRAINhFf1P2AMBms/D0ijjc9dlpfHWyEvfN\n",

"D0ewh8tQL9EmRiOF7Fo59uc3IiOvEQUNyl6P5bJZuHFaEB5eFIlQTyJECQQCYaghgpRAINhFf5qa\n",

"LEmJ9saCKC8cK2nB2xlF+N+tU4ZwddaodQYcL21BRl4TDuQ3okmpYfaxWQCLxYLBIjLK47Bw0/Rg\n",

"PLwwcsSEM4FAIExEiCAlEAh20d8aUkueXhGHY+8fw46LtViXEo7EAMlQLQ8tKg0OFjRhf14jjha3\n",

"oFNnYPa58jlIi/WGgMvB5RoZSpvbAdA/060zg7FhYSQC3ZyHbG0EAoFAsA0RpAQCwS4EdkZIASA5\n",

"SIJrJwdg56U6vLGnEF/cN8th66EoCqXNKmTkNWF/fiPOV7WBsigHDZA4IT3BF0vifdGpNeDjI6WM\n",

"dZOAy8bts0KwIS0SfhInh62JQCAQCPZBBCmBQLALe2pILfnr0hjszq7HkaJmHC9twbxIrwGvQW8w\n",

"4lxlm6kpqQnlLe1W+5MCxUiP90V6vC8S/MU4UNCEN/cWIrtWDgBw4rGxZnYo1qdGwEdMhCiBQCCM\n",

"NESQEggEuzALUnv9OMO8XHHH7BBsP1GJ13cXYMcj88Fisfr9eJVGj0yTNdPBwibIOnRda+KwMTfS\n",

"E+kJvkiP94G/xBlGI4V9eQ146qfLyKtXAACceRzcPTcU61Ii4C0anRZUBAKBMBEhgpRAINgFn8MB\n",

"0D/bp+48ujgaP52rwaUaOXbnNOCqZP8+j6+TdeJAfiMy8ptwsrTVKirr5sLD4jgfLI33RUqMN4QC\n",

"+u3MaKTw5+V6bDpYzHTSu/I5uHteGNYtCB+1XqgEAoEwkSGClEAg2IW9XfaWeIsEWJcSgfcOFOPN\n",

"vYVYmuALHqdrgjFFUcitUzDWTLl1CqvHh3u5YmkCnYqfFuIGrsVjDUYKf2bXY9OBYhQ3qQAAIgEX\n",

"a+eH4b754XB35Q/kxyUQCATCMEAEKYFAsIvBCFIAeCAlHF+frERZSzt+OFuNm6YH4WSZFPvzaJP6\n",

"ermaOZbFAqaHuJtS8b42pyTpDUbsvFyHTQdLUGbqmhc5cXHf/HDcNz8cEhfegNZJIBAIhOGDCFIC\n",

"gWAXjO3TAGe6i5x4uHNOKN49UIxnf83BcztyYDkkyZnHQWqMF9LjfbE4zqfXFLveYMSOi3X44FAJ\n",

"09QkceZh3YJw3DM/DGInIkQJBAJhrEAEKYFAsIuBRkjLW9qxP68RGfmNOF0uZbYbKcBHJEB6gi+W\n",

"xvtibqQnnHicXs+j1Rvx64UafHCoFFXSDgCAuwsPD6RG4K45oRARIUogEAhjDiJICQSCXfTXh9Rg\n",

"pHCxuo3xBy0x1XXaYvfjKVdsNtLoDfjpXA0+PFSKWlknAMDTlY8HUyNw55xQuArI2xmBQCCMVcg7\n",

"+BiipEmJokYVYv1ECPd0BZvdf8scAsFR9OVD2qHV42hxC23NVNCE1nYts4/LZmFOhCfS432wJN4X\n",

"gW7OuGbTMeTVK/Dh4VI8d02CzeupdQb8eLYaHx0uRZ2pvtRLKMCGtAjcMTsELnzyNkYgEAhjHfJO\n",

"PoZY98VZVLTSKUoXPgfx/mIkBpi/JIj2FULA7T3VSSA4gu6jQxsVahzIp6Ogx0parCKnYicuFsX5\n",

"ID3eF2mx3j3qOp9eGYd7Pj+NL09U4t75YQhy75ofr9YZ8O3pKnx8pBSNCnoGva9YgA1pkbh9Vkif\n",

"aX0CgUAgjC2IIB1DPLQwEttPVCK/XoEOrQHnKttwrrKN2c9lsxDtK0KChVBNCBCTmjqCQzFHSFUa\n",

"PVa9fwyXauRW+4M9nLE03g/pCT6YGeZhZevUndRoL8yL9MTx0la8nVGEt2+Zgk6tAV+fqsTmzDI0\n",

"K2kh6i9xwkMLI3HLjGAiRAkEAmEcwqIoy6nPo5Mnn3wSb7/99kgvY9Sg0uhxqVqGc5VtOFvZhguV\n",

"bVBq9L0eH+rpwkRRE0xC1UdExiUS+o/OYMTpciky8hrx/ZlqdOoMVvunBLthaYIvlib4ItpHaNcE\n",

"pkvVMqz6IAsAcMPUQGQWN6NFRaf6A92c8fCiSNw0PYhE/wkEAmEcQyKkYxChgIv5UV6YH0XPAjca\n",

"KRQ3qXC2UspETStNqX0AqGztQGVrB3ZlNzDbvEUCOoLqTwvVxAAxQjxcSF0qgUHeqcPhwibsz2/C\n",

"4cImKNU9b3peWpWIFUl+g7rBibTwFv3lQi0AOsq6cVEUrp8axERkCQQCgTB+IYJ0HMBmsxDrJ0Ks\n",

"nwhrZocCAJqVGpyvamMEanaN3KoJpVmpweHCZhwubGa2CQVcJPiLmSiquS61r5QrYXxRLe1Ahsmg\n",

"/nS5FHoLg1AvIR9L4nyREuOFjd9cAABcPzVwwCUhCrUOX2RV4LOscqvtN00Pwqs3JJPnHYFAIEwg\n",

"iCAdp3iLBFie6IfliX4A6AaR3Do5zlZ0iVTLDmiALgU4XSHF6Youj0g+h40YP6FVJDXeX0wsdsYJ\n",

"RiOFy7VyZkqSefa7mWgfITMlaWqwG9hsFoxGCgAtSAcyrUneocPW4+X4/Fg5FKaoa4S3K5oUGqg0\n",

"epQ0qcAlkXoCgUCYUBBVMUFw4nEwPdQD00M9ANAzwytbO2hxWtWGcxVtKGpSontFsdZgRE6tAjm1\n",

"CgA1AOhxjuGerqZIqoRpoLqSjyRhdKDWGZBV0oL9+Y3Yn9/ENA4BAIfNwswwd6TH0yI0zMu1x+PZ\n",

"bBZ4HBZ0BsquaU1t7Vp8nlWObVkVTM1zlI8Qjy6OwjWTAtDarkHaG4dxsVqGvbkNWJHkP/gflkAg\n",

"EAhjAiJIJygsFgthXq4I83LFjdODANA1gxeq2nDeJFIvVMnQoTX0eCxFAWUt7Shraccfl+uZ7X5i\n",

"J4t0Py1Wg9yd7WpwIQwNzUoNDhU0ISO/EUeLm6HWdQlJoYCLtFhvLI33xcJYb7i58K94Ph6HDZ3B\n",

"0K8IqbRdi0+PluGL4xVoNz2fYn1FeGxJNFYm+TF1yz4iJ6xLCcemgyV4Y28h0uN9wSVpewKBQJgQ\n",

"EEFKYJA487Aw1gcLY30A0LPCCxqUTIr/XGUbMyHHFg0KNRoUahwsaGK2iZ243SKpEkR6uxKhMcRQ\n",

"FIXSZhX25TVif14jLlTLrKLfgW7OSI/3QXqCL2aHe9rdOMTnstGh7VuQtqg02JJZhi9PVjI3NvH+\n",

"Yjy+JArLEvxsNtA9mBqBr05Woqy5HT+eq8Hts0LsWheBQCAQxiZEkBJ6hcthIylQgqRACe6ZFwYA\n",

"qJd34nylDGcrpThf2YbcOoVV40t3FGo9TpZJcbLMoi6Vy0acn8jkk2qqS/UTw5lPbH0Gg95gxNnK\n",

"NqYetMLCaQEAkgMlSI+nrZni/UWDilybzfE1NgRpk1KNT46U4atTlUwkNjlQgseWRCM93qfP64qc\n",

"eHh0cTRe+iMP/8sowuopgeR5QSAQCBMAIkgJduEvccbVk5xx9SS6vq9Ta8ClGtoT1Zzql3Xo+jyH\n",

"Vm/E5Ro5LtfIAVQDANgsIMJbaJXuT/AXw931yunjiYxSrUNmEV0PerCgCfLOrt89n8PGvChPpMf7\n",

"Ykm8D/wlzg67rq3xoQ1yNT4+UopvT1cxQnVysBseXxKFRbF9C1FL1swJwedZ5ahp68TnWeV4ZFGU\n",

"w9ZNIBAIhNEJEaSEQeHM52BOhCfmRHgCoLu2y1racc7kiXq2sg1lze1XPI+RAkqaVChpUuG3i3XM\n",

"9gCJExNFTQwQIzFQggCJ04SuS62VdeJAfiMy8hpxsqwVOkNXhNrdhYfFcb5YmuCDBdHeEA6RGwIj\n",

"SPVG1Mk68dHhUnx/ppoRqNNC3PB4egxSo73s/lsJuBz8dVkM/vL9JXx8pBR3zAohNyYEAoEwziGC\n",

"lOBQ2GwWonyEiPIR4taZdP2ftF2LC1W0OD1X2YZL1TKbqV5LBFw2NHoj6uRq1MnV2J/fyOxzc+Ex\n",

"UVSzUA33EoIzTq2CKIpCbp0CGXm0CM2rV1jtj/ByxdIEX6Qn+GJaiPuw/B7MKfu//3QJDXI1I4pn\n",

"hrnj8SUxmB/lOaibhlWTA/FJZjny6xX48HAJnr06wSHrJhAIBMLohAhSwpDj4crHknhfLIn3BUBH\n",

"1fLqFaZGKSnOVrShycJ6CKBrEyXOPDjzOHDmcyDgsmEwRV9lHTpklbQiq6SVOd6Jx0acn9hKqMb6\n",

"icbs3HON3oATpa20NVNeExoUamYfmwVMDzVZMyX4ItJb2MeZHE9VawfjV1otpZvc5kR44PElMZgT\n",

"4eGQ6DWbzcLTK2KxdusZfHG8EmvnhyPQzXElBwQCgUAYXRBBShh2+Fw2pgS7YUqwG+5fEA6KolAr\n",

"62Q6+c9WtKGgQQF5p86qJtKVz8G0EDeInGihyueyUdnajvx6JTp1BlysluFitYw5nsNmIcpUl2ru\n",

"9E8IEEPiPLDJQkONtF2LQwVN2J/fiMyiZsYiCQBc+BykRnsjPcEXi2K9R8TztbylHR8cKsGvpvGe\n",

"Zr5/cA5mm0o2HElajDfmRHjgZJkU/8sowps3T3b4NQgEAoEwOmBRVHcr9NHHk08+ibfffnukl0EY\n",

"RlQaPS5Vy+jJUlVtuFDZxpipm2GxaD/LqSFu8HDlw5nHgVKtR26dArl1crT10lwV5O7cLeUvga9Y\n",

"MCJ1qeUt7cjIa8D+vCacrZTC0rDAVyxgoqBzIzxHLNpb2qzCBwdLsONiLbobKrxz6xSsnho4ZNe+\n",

"WC3D6g+ywGIBux9PQZyfeMiuRSAQCISRg0RICaMSoYCL+VFemB/lBQAwGCkUN5k8UU0itdKUOrYc\n",

"d+klFGB6qBseWhiJQDcXsFhAcaMKuXVy5NYpUCvrRE0b/bU3t6su1dOVb+WXmhAgRrinq02vzMFg\n",

"MFK4UNWGjHzaH7S0W8NXvL8YS+N9sDTBD0mB4hFt3ipuVGLTwRLsvFzHeJgujvPBo4uj8N6BYhwq\n",

"bB7Q6FB7mBLshquS/bAruwH/3VOIz9bOHNLrEQgEAmFkIIKUMCbgsFmI8xMjzk+MNbNDAdB+l+cr\n",

"ZThf1YazFVLk1CrQotJgb24jIzb5XDYmBUowPdQdN04PQpSPEI1yNXLrFMirpyOpJU0qtLZrcbS4\n",

"BUeLW5hruvA5iPe3njwV7SuEgGtfpLJdo8fR4i5rJmm7ltnH47AwJ6LLminI3cUBv63BUdCgwKYD\n",

"JdiVU88I0aUJvnhscTSSgyQAurrsNXaMDh0of1sWi725jThQ0ITT5VLMCvcY8msSCH1BURRyahUI\n",

"8XQZtSVABMJYgwhSwpjFR+SEFUl+WJHkB4Ce0Z5TK7eaLNXarsVZk/2UmTBPF0wP9cDMMA9sSItE\n",

"sIcziiyiqLl1ChTUK9ChNTDnMcNlsxDtK2JEaoI/HU0VOVl/KDUq1KaGpEZklbZaRRLFTlwsjqOn\n",

"JKXGeEPsNDo+0HLr5Nh0oAR7chuYbSsS/fDokigkBkisjuWbRPlQR0gB2p/21pnB+OZUFV7bnY+f\n",

"H5o3oW2/CCOHzmDEH5frsPlIGQoalIjyEWLnxgVkeAOB4ACIICWMG5x4HMwI88CMMDqCRlEUKls7\n",

"GLup85VtKGpSoqK1AxWtHfj5fA0AQOTExbQQd8wIdcc1yf549qp4CLhslLW00yK11hxNpRut8usV\n",

"yK9X4KdzXdcO9XQBh8VCnbzTak68mRAPF9qaKd4XM8LcwRtFo1Oza+R490AxY63FYgFXJfvj0cVR\n",

"vdZsmm2fhkOQAsATS6Lx6/lanK+SYV9eI5Yn+g34XEYjBXmnDq3tWkjbtWhVadDarkWrSgtpuwYt\n",

"7VpIVfS+GWHueHl1EhHAE5x2jR7fn6nGZ8fKrcYnlzSp8MquPLy8OnkEV0cgjA+IICWMW1gsFsK8\n",

"XBHm5YqbpgcBAOSdOlyo6oqgXqyWQanW40hRM44UNQOgywPi/UWYHuKOaaHuuHdBOAIkTgBoU3pz\n",

"FPVStYx5TGW3MZ2WLE3wxeopgUgMECPEw8XhdakD5WK1DO8dKMbBgiYAtBC9dlIANi6OQoyvqM/H\n",

"WhrjDwc+YifctyAMHxwqxX/3FmJJnA+4JlFMURQUnXq0tncJy9Z2DaQqLf29SXRK27VoUWnR1qGF\n",

"oY9xt5YUNiqxakogKROYoLSoNNh+vAJfnKhkHD+8hHzcOz8cYZ6ueOSb8/jqZBUWxfowtnYEAmFg\n",

"EEFKmFBInHlYGOuDhbE+AOj57wUNSqs0f62sEzm1CuTUKvDFiUoAgJ/YCdPD3BHtI4RSrUdtWyfO\n",

"W6Ty+8JsaA/QzVrmNL9lXepwRkzPVbbh3QPFyDSJaTYLWD0lEA8vikKUT/88TQXM6FDDFY60H4qi\n",

"oNToTYJSYxKYWuhNIrKkSYWoZ3cj3l+MVpUGbR1aq2lV/UXkxIWnKx+eQgE8XPnwEvLh4cqHh6sA\n",

"XkI+dmc3YE9uAz49WkYE6QSjsrUdW46W4cezNcwQjzBPFzyYGokbpgUyjhfnq8Lx2bFyPPXTZex5\n",

"IhXeouG3YyMQxgtEkBImNFwOG0mBEiQFSnDPvDAAQL2800qgXq6Ro0Ghxp+X622ew0ckwFMr4nB1\n",

"sj9TS9ah1SO/Xok8i7rUwgYlVBo9TldIcbpCyjyez2Ejxk+IRH8JI1Tj/cVwdfDYz9PlUrx3oBjH\n",

"SujGLQ6bheunBuKRRVEI93K161z2REgpikK71tAzNa6yTplLmX1aZgRpX+R3m1glFHDh4cqHp5BP\n",

"C01XATzM/xeavnflw0sogLsr74rNaQn+YuzJbUBGfiMqWtoRZufviDD2yK6R4+PMUuzOrmcsziYH\n",

"SbAhLRLLEv16TEH7+/JYZJW0oKBBiad+uoTP184k5R0EwgAhgpRA6IavyAmBbs7Ir1dAY6MetDtN\n",

"Sg3+9iM9d316iDumh7ljeqg7poW4YXqoO3OczmBESZMKeSaBmlsnR169Akq1nonImmGxgHBPVysr\n",

"qsQAsd2G+BRF4URZK947UIyTZbQI5rJZuGl6EB5eGIUQz4F19etNEcnTFW04kN9oJTRbmVQ5nTZv\n",

"adcOKLXvwufAU2iKWLrS0UuREw+fZ5UD6Or89zRFNh3t0xrtK8LCWG8cLmzGtuMVeOG6RIeenzA6\n",

"oCgKR4tbsDmz1Gr628JYb2xIi8Ts8N6njznxOHj3tqm49v1jOFTYjC9PVuLuuWHDtHICYXxBjPEJ\n",

"BACdWgOySmhrpv35TWhRdY0y5bBZmBXmgfQEX6TH+yDY3QVlLSpmqtS5qjaUdfMTBQB3Fx4tTEPd\n",

"MSPUA5OCJD1EE0VRqJZ2WnT40/92H6Vqxk/s1NXhbxKrQe7OPT4wKYpCVgktRM3RWB6HhZtnBOPh\n",

"hZE97KU6tQYmPU7XWtI1l1ZC06I+01bj1pVw4rHh6SpgIpjm1LiHKW1ujmR6mKKbtjqX9+U24MEv\n",

"6W6yz+6ZMeR1e8eKW3DnZ6fgwufgxDNLIHEZHY4IhMGjNxjxZ3Y9Nh8pQ54p2s5ls3Dd5AA8kBqB\n",

"eP/+D2H4/Fg5XvojDwIuG388ugDRV6jBJhAIPSGClDBhaVZqcLCgERl5TThW0mwlskQCLtJivbE0\n",

"wRcLY3yuKESk7Vqcr6TF6bmKNlyqkTG1Z2a4bBYSAyWYEUpHUKeHusNX7NTr2sw+qbl1CuTVKVDe\n",

"0lP0ArSNlGUktVWlxc/na6wGBggFXNw8Iwh8Lttms0+HduC1oMmBEutUuakm07Ob0HThDy4hU9qs\n",

"wqr3s6DS6LF2XtiwRCwpisLKd4+ioEGJZ1bGYUNa5JBfkzC0dGj1+OFMNT49Vo6aNrpj3oXPwW0z\n",

"Q3B/SjgC3ZztPqfRSOGeradxtLgFCf5i/PrIPLv9igmEiQ4RpIQJA0VRKGlSISOfbjK6WC2D5bM/\n",

"0M2ZsWaaFe7B1EkOBK3eiLx6Bc5WSE3G/W02o55B7s6YHkpbTk0LdUecn7hHnRoAaPQGVEs7cMxk\n",

"3p9Z3DygRp6+4HPYjLA011raqsn0chXg90u1eHNfEa6Z5I/375jm0HXYQqXR4/oPslDcpMKsMA98\n",

"/cDsYWsE+/FsNf7+02X4iZ1w9OlFo8qyi9B/pO1afHG8AttPVDBjhT1d+bh3fhjunBMKNxf+oM7f\n",

"pFBj+TuZaOvQYX1qBP5xVbwjlk0gTBhIDSlhXKM3GHGmos2Uim/sYc80KUhCz4uP90W8v8hhDQl8\n",

"LhtTgt0wJdgNAC2Ga9o6GXF6sqwVxU0qZozpbxfrbJ7H05UPrd4IpUbvkHWZifB2RWq0N1JjvBDh\n",

"JYSHkA+RgNvvn9/84T0ctk8UReGpny6huEkFX7EA76+ZOqyi8LopAXh9TyEaFGrsyq7HqimBw3Zt\n",

"wuCplnZgy9Ey/HC2msmChHq64IGUCNw0Pchhtcc+Yie8duMkrP/yHD45Woa0WG/Mi/RyyLkJhIkA\n",

"EaSEcYdSrcORombsz2vEocJmxj8QoIXi/EhPpCf4YkmcL/wktlPm9qI3GCHt0PaowTR7X0q71Wcq\n",

"1P0TmK0WY0bNxPmJ4O7Cx7nKth7d6NND3fH0ijgIuGxUSTsYQ/+8OjlaVF3nKmtuR1lzO7Ydr0Cg\n",

"m7P1iNRACQIkTn2KU6bLfhhGh36SWYZd2Q3gcVj4cM10+Igc8zfrLwIuB/fMDcVbGUXYcrQM100O\n",

"IJ3UY4CcWjk2Z5bhz8t1TMd8ciDdMb8iqWfHvCNYnuiH22cF49vT1fjrD5ew5/FUUndMIPQTIkgJ\n",

"44Katg4cyG/C/vxGnCxrtUpne7jy6VGd8b5Iifbql52SwUihraOriadVZWuqjxYt7bTwlHXornjO\n",

"7rBZYBp4PFz5cHfloVWlRUVrOxoVtpuaAFjVhgJ0qn1dSjjuXxBu1YU/OdgN104OYL5vUqitGqdy\n",

"6xSoknagVtaJWlknM6kJoBuyunf4h3sJmQ9xwTAZ42eVtOD1PQUAgOevTbRyLRhO1swJxfuHSpBT\n",

"q8DpcilmR3iOyDoIfWNu5tucWYqjxS3M9tQYb2xIjcDcSM8hv5l47poEnCyTorylHf/3azbev2Mq\n",

"uYEhEPqBXYL0sccew++//47KykpcuHABU6ZMsdq/detW3Hffffj111+xevVqAEBTUxPuvvtulJaW\n",

"QiAQ4MMPP0Rqaqqj1k+YoFAUhZxaBTJM8+LzunlSRni7YmmCL5bG+2JqCC1iZB1a1Mk6Gf9LKy9M\n",

"C7siaTs9zcfe6moWC3B3MXeQ26jBtDJgF8DNmXfFqU1NSjXOV7bhdHkbY3fUHa3BiNPlUhiMFNPV\n",

"72XDHspH7AQfsRMWxfkw2xRqHWNDlWcSqyVNKrR16JBV0mplg+PM4yDOX4QEfzGqTc0gyn5GegdC\n",

"TVsHNn5zHkYKuHl6ENbMDhmya10JD1c+bpwehG9OVeHTY+VEkI4y9AYjduU0YPORUuTW0e8FHDYL\n",

"10zyx/rUSCQE9L9jfrC48Ll459YpuPGj4/gzux6Lzvswk+IIBELv2CVIb7rpJjz11FNYsGBBj30V\n",

"FRXYsmUL5syZY7X9mWeewZw5c7Bnzx6cOXMG119/PcrLy8HjkTQGwT7UOgNOlLViv2nyka0mIaGA\n",

"i6khbhA783CpWoZDBU1oNY2L7Oe0SCvcXXg2bIks7IosbIzcXPgOTwN6uPDRoTXgcGGT1XYXPgfJ\n",

"gRKUNKnQ2q7F2co2nLWYHBXu5YppIXQn/4wwd0R5C22KX7ETD3MiPDHHQmCpdQYUN6qsrKjy65Xo\n",

"1BlwoUqGC1Uy5tjsWjmW/y/TyoYqIUAMifPgXt9qnQEPfXUebR06JAdK8O9RME/+vvnh+OZUFfbn\n",

"N6K8pd3uYQIEx9OpNeDHc9XYcrQM1VL6JsmZx8GtM4Nx/4JwBHsMzGd3sEwOdsMT6dF4c18Rnv8t\n",

"B7PCPAbs+UsgTBTsEqS9RTaNRiPWrVuHTZs24a9//avVvh9++AElJSUAgJkzZyIgIABHjhxBenr6\n",

"AJdMGI+Y55GbU+DmVHlJkwo/na3pd1OPSqO3StV1R+LMs/a7NAtNVz48hCYDdtNUH3cXHjMvfbjR\n",

"GYzYcaEWHxwqQYWpEcvNhYd1C8Jx97wwiJ1owUdRFCpaOywmS0lR1KhCeUs7ylva8fP5GgD0mMxp\n",

"Ie6M5dTkYLdeSxeceBwkB0mQHCRhthmMFMpb2mkz/zoFNmeWMfsKG5UobFTilwu1zLYgd2dmNKr5\n",

"X1+xoF+ikqIoPLcjB9m1cri78PDRndMcbno/EKJ8hFgU641Dhc3YmlWOl1YljfSSJixt7VpsP1GJ\n",

"L05UQGqqs/Zw5eOeuWG4e24o3F0H1zHvCB5aGIUjRc04U9GGJ76/gB/Wzx2x9xMCYSzgkBrSt99+\n",

"G/Pnz8f06dOttre2tkKn08HPz4/ZFhYWhqqqql7PpdFooNFYR74MQzAvmzC0mOeR9zYm0lbzj34A\n",

"IUyRE7crNd5tRKT5/+YIprsrf9Rb9mj1RvxyvgYfHC5hIj7uLjw8kBqBu+eGQdhNRLJYLIR7uSLc\n",

"y5VJC8o7dDhf3YbzJuP+i9UyKNV6HClqxhHT/HoOm4V4f5FpspQHpoe69+m/yGGzEOUjRJSPEKum\n",

"BGJxnA9u/eQkXPgcvHfbVKva1FpZJ+MesDe3qy7V05Xfoy41zNO1R+T261NV+PFcDdgsYNPt03qY\n",

"+I8k61IicKiwGT+ercGTS2MGbRVEsI9qaQc+O1aO789Uo1NHfy4EezjjwZQI3DQ92OYwhZGCw2bh\n",

"7Vum4Kp3j+J8lQwfHCrF4+nRI70sAmHUMmhBmpOTg59//hmZmZmOWA9effVVvPjii1bbupcBEIYf\n",

"iqKg0uh7TO/pTWj2dx55fxEKuLh1ZjBSY7zhZY5g9mMe+VhBozfgp3M1+PBQKWpltBD1dOXjwdQI\n",

"3Dkn1K659hIXHhbF+mBRLF0rqjcYUdCgxNkKKc5VyXC+sg21sk5mXOkXJyoBAP4SJ0wLdcf0EDrN\n",

"H+8v7lXAm7vs3V349ASrhK6JSbIOLfLqFEyHv7kutbVdi6MmH1UzLnyOVYe/Rm/Ev37LBQA8tSIO\n",

"C6JHl23OvEhPxPmJUNCgxDenq/DwwqiRXtKEgI7Kl+KPy/UwmG5cEwPE2JAWiZVJfqM28hjs4YKX\n",

"VifiL99fwnsHi5ES44VpISPTmEcgjHYGLUiPHj2KiooKREfTd34NDQ148MEHUV9fj4ceeghcLhcN\n",

"DQ1MlLSiogIhIb03J/zjH//Ak08+abXtueeeG+wyCd2gKAodWoP1mEiV9fSelnbr2eQD6ah25XOY\n",

"FLhlDaYzj4PcOjkuVMvQ3K0WlMdhYU6EJ5Ym+GJJvO+AJqeMFdQ6A344W42PDpeiXq4GAHiLBFif\n",

"GoE1s0MdEvHhcthICpQgKVCCtfPpbfXyTmb06fmqNuTWKVAvV+PPy/X483I9ALoWb3KwhJkqNS3E\n",

"nYkI9mX75ObCx7woL8yL6hKTap0BBQ1Kqw7/gnoFOrQGptygO8WNKmzNKkdigATx/iKInEa+7pzF\n",

"YmFdSgT+9uMlfHG8AusWRAxqgAKhdyiKwonSVnycWYZMU2QfAFKivbA+NRLzo4a+Y94RrJ4SiEMF\n",

"zfj9Uh3+8v1F/PlYSo9MB4FAGOCkprCwMOzYsaNHlz0ALFy4EE888QTTZb927VqEhYXhhRdewJkz\n",

"Z7B69WpUVFTY1dREJjX1jyvNI2/tVp85kHnkzjyORad4z2Yfy45yT1e+Ve1fg1zNGNQfL2m1EjMS\n",

"Zx5jzZQa4zUqxMdQotYZ8M2pKnx8pJRpzvIVC/BQWiRumxUy7DWTHVo9LlXLTcb9Upyvkln5t5qJ\n",

"8hFiRqg7JM48po70xw1zkRwosXvNeoMRZS3tyKtT4GK1DNuOV/R5fKinC1OPmmCKqA63JylAR7MX\n",

"vH4IzUoN/nfrZFw/lXRQOxKDkcKenAZszizF5Ro5ANoi7ZpJAXgwNQJJgZIrnGH0Ie/U4ap3j6JW\n",

"1olbZgThjZsmj/SSCIRRh123aevXr8eff/6JhoYGLF++HCKRiGlY6o3XX38dd911F6Kjo8Hn8/HV\n",

"V1+RDvt+otYZaBsilcnv0uyJaZEat0yVm2uq7EHAZVvZE1nZFdmoybRnHjlFUcirUzAi1PzhYibU\n",

"0wVL4+l074xQ91GbdnMkHVq9SYiWoUVFC1F/iRMeXhiJm2cEj1jzjgufi7mRnpgbSXfbG40UylpU\n",

"OFvRxkQwy1raUdKkQkmTyuqxN398gvn/XXNCsSDaCzNC3a08UW3B5bAR4ytCjK8Il2pkAOjSjI/u\n",

"nIYOrYEx9DdHbytbO1DZ2oFd2Q3MObxFgi5D/wAJEvzFCPFwuaKd1mAwG+W/ua8Inx4tx+opgWMi\n",

"UjfaUesM+PFcDT49WsZMVHPisXHrjGCsS4kYsY55RyBx5uGtWybj9i0n8cPZGiyK9cHKZP+RXhaB\n",

"MKogs+yHEY3eYJUat0yHM2lyC6HZrrVfYPI57F46yOkZ5N2bfVz4HId+mGr1Rpwqp62Z9uc3MfWQ\n",

"AO3TOTXYDekmf9AoH+GE+SBv1+jx5clKbMksY6YvBbo545FFUbhxeuCYqIWVtmux81Idnv89t9+P\n",

"SYvxxtXJ/pge5o4IL1ebf+8dF2rxxPcXAQCf3DUdyxL9ehwjbdcyPqnmutSylnabXrEiARfx/mIm\n",

"ipoYIEG0r9ChDW3Sdi3mvXYAap0R3z4whxHyBPuRdWjx5YlKbDtewbw23Fx4uGduGO6ZFwaPUdAx\n",

"7yhe31OAjw6XQuLMw94nUh02KY5AGA8QQToItHoj2jr6qME0j4w0RTkHMo+cx2H18Lvsnhq3TKEL\n",

"7ZhH7ihkHVocLmxGRn4jjhQ2Q2Xxczrx2EiJ9sbSeF8sivOBt6jvqNl4Q6nWYfuJSnx6tAxtpmlO\n",

"wR7O2LgoCtdPDRoz9YetKg0+OFSKr05W9qgbffaqePx2qRY5tYpeHt1FkLsz1swOxaxwD8ZH9YaP\n",

"sqDWGfHo4ij8dVlsv9fUodUjv17JRFFz6xQobFDarGvlc9iI8RMi0V+CxEBaqMb5ie1qFuvOs79m\n",

"4+tTVUiP98Gn98wc8HkmKrWyTnx2tBzfnalCh+nmO9DNGQ+khOOWmcF2ZWPGClq9ETd8lIWcWgXm\n",

"R3niy/tmD2k0n0AYSxBB2gutKg2ySlvplHg3oWn+f3/nkVvCZbPgbiMd7mWjBtPDlQ+x0/ALzP5Q\n",

"2dqOjDw6FX+moo3pfAXoNGp6PF0POj/Ka1R4SA43CrUOX2RV4NNj5UwtZpinCzYujsaqKQGj3n7K\n",

"jEqjx2dHy7HlaBlzozEnwgMbF0Xjzs9OAQAK/r0CTjwOKIpCTRvdLHWgoAk7L9XZda0Lzy0dtH+k\n",

"zmBEabMKubVdHf559QqbE6VYLCDc07WHFdWVSg3MlDarsOStIwCAg39NQ4S3cFBrnyjk1yvwSWYZ\n",

"fr9Ux7xvxPuLsSEtAlcn+4/70p2SJhWu2XQUap0R/7w6HutSIkZ6SQTCqIAI0l5Y9UEWLlXLrngc\n",

"PY9cYGW23uvISFcBxM6jU2BeCaORwsUamSkV34iiRus6wlhfEdITfLA0wQ+TAiUT9q5f3qHD51nl\n",

"+DyrnBFBEd6ueHRxFK6dFDBmPmw1errp6v2DJUwaNTFAjKdXxCEl2gs6A4WYf+4GAFx6flmvk5mU\n",

"ah0uVstworQV209UWkXPeyMl2gvXTw3EzDAPBLk7D/r1QlEUqqWdVun+vHoFGhU9J30BgJ/YiRGn\n",

"CSah2ts67t92BgcKmnDnnBC8vDp5UOscz1AUhZNlUmzOLMXhwq6O+flRnlifGomUaK8x+b44UL46\n",

"WYl/7sgBn8PGjkfmD+toUwJhtEIEqQ0oikLCv/aiU2dAerwPAtyce9RkmqObkn7MIx+rdGoNOFbS\n",

"gv15jThQ0MQ04QC06fPscA+kx/siPd53wo/Fa2vX4rNj5dh2vIIRXdE+Qjy6JBpXJ/s7fKToUGEw\n",

"UthxoRZvZxQx9b9hni742/JYXJXkzzzXKYpC+D92AQDOPJve71IMg5FCUaMSd2w5yZQwXIkAiRPu\n",

"mReGeZFeiPcXOUzUNys1Jq9UuamBSoHylnabx4qduN0iqRJEervidIUUd2w5BSceGyf/sYQY5XfD\n",

"YKSwL7cBHx8pxSWLjvmVyf7YkBppNQ1sIkFRFB7Yfhb785sQ4yvE7xsXTMhMEoFgyfgr0nEA7VoD\n",

"07H+7m1TB1VnNtZoUqpxML8J+/MbcbS4BRoL71GRgIuFcT5Ij/fBwhgfSFyIW0KrSoNPj5Vj+/EK\n",

"pgktzk+ERxdHY2WS35i5WaEoCvvzm/DfvQVM9NtHJMDj6dG4ZUZwjxIDFosFPpcNrd5o1wAEDpuF\n",

"amkHI0b/d+tkzI/0wvmqNuzLbbQaP2qmTq7Gq7sLrLbdOScEyxP9MDXEfcCejt4iAdJE3kiL8Wa2\n",

"qTR65NcrkFtrEqn1ChQ1KqFQ63GyTIqTZVLmWAGXjTg/EQBArTPibz9exqbbp46qaUEjhVpnwC/n\n",

"a7HlaBkj8gVcNm6ZEYx1KeEI9XQd4RWOLCwWC6/fOAnL3zmKokYVXttdgBeuSxzpZREII8rEUVp2\n",

"YDZqd+Vzxr0YpSgKxU0qph70YrXMqnM50M0ZSxN8sTTBFzPDPMZME85Q06zUYMvRMnx5opK5eUnw\n",

"F+OxJdFYluA7ZoQoAJwul+L1PQWMOb3YiYuHFkZh7bywPsWVgGMSpHYMTChtVuHJHy4BANbOC2M8\n",

"PFck+WNFkj/evnUK1DoDsmvlyCppwefHym3Wan91sgpfnewaQTw3whO3zQrGrHAP+EsGPkhBKOBi\n",

"ZpgHZoZ5MNu0eiOKm5RMFDW3To68OgXatQYm6gcA+/MbEf+vPYjyEVpZUSUGiCdM5FTeocNXpyqx\n",

"NauCyahInHm4Z24o7p4XBq9+1udOBDyFAvz35km4d+sZbDtegYWx3lhomq5GIExExrfaGiBmQTpc\n",

"HeF5dQo8/3sOJM58C6saMQLdBl8/ZwudwYgzFVLsz6MjoVXSDqv9k4MkdCo+wRdxfqIJVdt1JZoU\n",

"amzOLMPXpyqZwQLJgRI8tiQa6fE+Y+p3lVenwH/3FuCQqabPicfGvfPDsSE1sl/Rbz6XDWjQb0Gq\n",

"0uix4ctzUGn0mBXmgWevjrd5nBOPw4jCJ9JjQFEUKlo7cKZciu/OVOF8lazHY06UteJEWSvzvY9I\n",

"gHUp4UiJ9kaMr2hQJRN8LtskLLvSy0YjhUppB3Lr5LhULcOWo+XMPrNX628Xu5q6At2cmdd2gr8Y\n",

"iYESBEicxtTzpS/qZJ34/Fg5vj1dxWQKAt2ccf+CcNw6M3jc39gPlEWxPrhnbii+OFGJv/14GXuf\n",

"SOl3Ux2BMN4g7xI2GG5BWtykxJkKOjq1P7+R2S5x5tEfXgFik1WNBBFergOqoVOodThS2Iz9+Y04\n",

"VNBkFXXic9lYEOWF9HhfLIn3ga+YeON1p0GuxsdHSvHN6SpGgE0OdsMTS6KxMNZ7TAmLytZ2vJ1R\n",

"xAgmDpuF22YG47El0Xb97Znxof0QpBRF4amfLqG4SQUfkQDvr5nab6cBFouFcC9XhHu54paZwQDo\n",

"SNz56jbsulyPH8/V9HhMk1KD/+wqANCV6r9jdgiunRSAKcFug06rs9lda7pmUgDcXPj4795CeAkF\n",

"+O9Nk6xGpFZJO1Ar60StrBMZeV2vb3cXXo8O/3Av4ZipNwaAwgYlNmeW4veLddCbOubj/ETYkBaJ\n",

"qyf5jxk3iZHkH1fF43hpK4qbVHj652xsuXv6mHo/IRAcBRGkNmhW0jPFh2ss4XWTA6DWGfD6nkJI\n",

"TR3NAD1urnvkx1y3Zu7+TQgQI95PbPMDtqatgzGoP1nWynxgAICnK58e1Zngi5Ror3Hp+ecIamWd\n",

"+PhwKb4/U83USk4LccPj6TFIHWOdwU1KNTYdKMG3p6uY58I1k/zx12WxCPeyv6ava579lQc4fJJZ\n",

"hl3ZDeBxWPjozumDfm1JXHhYFOuDRbE++O/Nk6E3GJFfr0RmcTM+O1Zu9Toy882pKnxzqivNPyvc\n",

"A3fPDcXscM9B33yumR2C9w+WoEWlgYDHxsbF0cw+hVpnSvV3pfxLmlRo69Ahq6QVWSVdr29nHgdx\n",

"/iLTjSj9Go/1E42qhheKonC6XIrNmWU4WNDEbJ8b4Yn1aRFIixlbN2gjjROPg3dum4LVH2Rhf34j\n",

"vj1djTtmh4z0sgiEYYeoEBs0DXOElMVi4daZdJPGm/sK8fWpKqaOM8ZXiJlhHihqVFrVrVnWrrFZ\n",

"QIS3EPH+YhgpCvWyTtTL1aiXq62uE+ntivQEXyxL8MWUYPcxFYkZbqqlHfjwcCl+OlcNnYH+Y8wK\n",

"88Dj6dGYF+k5pj5wFWodNh8pxefHKph619QYbzy1PHZQc8H5puiX5goR0qySFry+h45UPn9tIqaH\n",

"ug/4mr3B5bCRHCRBcpAEjyyKAkCnkc9USPHVyUomA2HJ6XIpTpd3NSl5Cfl4ICUCS+J9Eelte6pU\n",

"b7i58HHT9CB8ebISnx0tx7xIL2af2ImHORGemBPRNc1JrTOguFFlZUWVX69Ep86AC1UyXLAoS+Cw\n",

"WYjyFjI3oIkBEiQEiHu12hoqjEYK+/IasTmzlFkfiwWsTPLDg6mRmBLsNqzrGU8kBkjw9+Wx+M+u\n",

"Avz7jzzMifAgvraECQcRpDYY7pS9GTcXPl5enYxbZ4Tgud9ycLFahqJGFSgKeGlVEmaHe6BS2mE1\n",

"QvF8VRuUar3NGeNmXPgcPL4kGldP8h+yutTxQmVrOz44VIJfztcyUcS5EZ54bEn0mBsPqdYZsP1E\n",

"BT48XAqZqat9SrAbnloRayWYBkp/UvY1bR3Y+M15GCng5ulBWDOMkZ8AN2esmhKIVVMCAdCTnS5W\n",

"y7DzUh2+PV3d4/gWlRav7i6w6ui/dUYwbp4RhOQgyRXHu947PwxfnarEgYImlDarENmHoHDicRgB\n",

"bcZgpFDe0s5YUZmjqtJ2LQoblShsVFq5EAR7OCPRX2I1ItVXLHD461utM2DHhVp8klmGMlPHPJ/L\n",

"xk3Tg/BASsSAouuEnqxbEIHDhc04XtqKJ76/iJ8fmkdKHggTCuJDaoO1W0/jcGEz3rhxElOzNtwY\n",

"jRR+OleD1/YUMOnH6yYH4Nmr48Fls3CwoMuaqcOOmffd61IT/Gk/xbFi2D5UlLe04/2DJdhxsZaZ\n",

"HpMS7YVHF0djVrjHFR49utAbjPjpXA3e2V+MBgUdJY/yEeLvy2OxLMHXYYLl+g+zcKFK1uv8ebXO\n",

"gJs/PoHsWjmSAyX4ccPcUZV6NhoplDarcKiwCZ9kllv57PbGjFB33Ds/HPOjPG12zq/74iz25zdi\n",

"zewQvHL94I3yKYpCg0JtNXkqt07BeMR2x9OV36MuNczTdUCuD/JOHb42dcybb9LFTlzcbZoxP9HG\n",

"AA8H9fJOrHjnKOSdOjyyKBJ/Xx430ksiEIYNIkhtcPV7R5Fbp8DWtTOxKG5kbThkHVq8ta8IX56s\n",

"7PUYf4kT0xU/J8IDAi4HSrUO+fVKq0hLcZOSST9bYk9d6nijpEmFDw6V4LeLtTCX2KbFeOOxJdFD\n",

"kloeSiiKwu6cBry5rxBlzXQkK0DihL8sjcEN04IcXqJx6+YTOFUuxft3TMU1kwJ6rOWpny7jx3M1\n",

"cHfhYeejCxDkPvqHJ7SqNDhVLsX2ExVWnqO94ebCw/rUSFyV7IcQDxecLJPi9i0n4cRj4/gzS+Ax\n",

"yFGovSHr0CKvXsG8ts11qUYb7+aufA7i/cVWkdRoX2GvEd8GuRqfZ5Xjm1NVzJAHf4kT7l8Qjttm\n",

"hQzY95XQP3Zl1+Phr8+DxQK+e2AOZkeMrcwMgTBQyDuLDUYqZW+J3mDE+SoZ9uc3IqukxeYxs8I9\n",

"8K9rEpAYIO4R9RI58TAr3MMquqfVG+la1Hrbfoq26lKZaKpJrA521vhooahRiU0HS/DH5TqmXndJ\n",

"nA8eXRI9JmvhzHWal01/Q3cXHh5ZFIU754QOWVSyr5T916eq8OO5GrBZwKbbp40JMQrQ3pBXJfvj\n",

"qmR/APTPllMnx8/navC1RUOUGVmHDq/vKWBqZM2odUZ8cbwCf1kaMyTrdHPhY16kl1XphVpnQEGD\n",

"0qrDv6Cefn2frWzD2cquOloeh4UoH5GVXyqPw8I3p6qw42Itc+Ma6yvC+rQIXDs5gKSPh4mrkv1x\n",

"0/Qg/HSuBk/+cAm7Hk8Z9nphAmEkIBHSbhiM9Ixug5HC6f9bAp9htEBSafQ4WtSMDJM1k+VoRR6H\n",

"hTkRnpB36hjRAQDXTg7As1fFw08ysHUajRSqpB1W6cC8egUjyrvjL3GymvGd4N/7nO/RSH69Au8f\n",

"LMGunHpGiC5N8MVji6PH5BjDyzUyvLGnEMdMNy0ufA7WpUTggZRwiJyG9kNs3RdnsD+/Ca/dkIzb\n",

"ZnXVhp6rbMNtn5yAzkDhmZVx2JAWOaTrGE4oikJNWyf25TViS2YZUxLRF1OC3fBASgRSY7yG/G/S\n",

"Hb3BiPKWdqvXd26dAvLOK49tvWduKB5ZFDWs74EEGpVGj6vePYoqaQdWTQnAu7dNHeklEQhDDhGk\n",

"3WhWajDzlf1gsYDil1cOeW1lvbwT+/ObsD+vESdKW63GMLq58LA4tsuayfxhJu/Q4a2MQnx1shJG\n",

"ik7JPZ4ejXvnhzssitGkVDM2NeZoakVrh81jx0Jdak6tHJsOFmNvbpcP5MokP2xcHGVleD5WKG1W\n",

"4a19hdiV3QCAvmFZMzsUGxdHDds0nIe/Podd2Q14aVUi7p4bBoB+3ly76RgaFRqsTPLDh2umjZmb\n",

"lYGiVOtwskyKbcfLrSycekPkxMWGtEisnhqIQLeBT5UaKGZR/d6BYpsert3xFgl6TJ4KdncZU9PI\n",

"xiLnKttwy+YTMBgpvHvbFKY5j0AYrxBB2o28OgWueu8ovIR8nP3nUoefn6Io5NUrmClJ2bVyq/2h\n",

"ni5YGk+P6pwe6t6nqMupleNfv+Uwk2uifYR4cVWiQzqobWGuS82ziLRcuS61K5o6EnWpl2tkeO9A\n",

"Mfbn036JLBadEnt0cRTi/MTDuhZHUC/vxLv7aSFhMFJgsYDrpwTiL0tjEOwxvGnxJ767gB0X6/DP\n",

"q+OxLiUCOoMRa7acwukKKaJ8hNjxyPwJWW9oMFJ4/LsL+ONyfb8fc/3UQNwzLwzJgZIhtWPT6A34\n",

"7UIdNmeWotRUZ8znsHHj9EDcND0YnVqDlRVVWUs7bH1CiARcm3WpJK3vWP6XUYR3DxRDJOBi9xMp\n",

"Y6b0hUAYCBPv0+IKNJs6bR0ZZdLoDThVJsX+/Ebsz2tEnYU/KIsFTAtxR3q8L5Ym+CDSW9jviFJS\n",

"oAQ/bZiHn87X4PXdBShuUuGOLacGncbvjd7qUrvP+c6vV0Kl0VvUpdIWO2wWEO7latEBTFvWDEXj\n",

"x4WqNrx3oJgZi8lm0eUNGxdFIdpX5PDrDTWyDi0+OlyKbccrGN/P9Hgf/G157IgJa3MNqXk9/9mV\n",

"j9MVUggFXGy+a/qEFKMA7Rv68uokHMhvQqfOgK/XzUa0jxC7cxrwSWaZzQ75Xy/U4lcLS6dJQRI8\n",

"mBqBxXE+DhlaoVDr8M2pKnx+rJzxWRY5cXHXnFCsnR9mNahgQXTXDW2HVm91E5pXr0BBgxJKjR6n\n",

"K6Q4XdHV+MXnsBHjJ0Siv8Q0WU6MOD8xGRs6CB5dHIXM4mZcqJLhye8v4dsH5xD/aMK4hURIu/HT\n",

"uRr87cdLSIn2wpf3zx7weWQdWhwqbML+vCYcKWpmulUBehpLSrQX0hN8sTjOxyHidzjS+P2le10q\n",

"7as4PHWp5yqleGd/MY4W0zWVbBawemogHlkU1acv5GilQ6vH1qwKfHykFErTuNeZYe54ekUcZoSN\n",

"rB3Vs79m4+tTVXh8STTCvVzxxPcXAaBXG6iJxr9+y8H2E5VYFOuNrffOstqn1hlwsqwVnx0rZ56r\n",

"feHK52B9WiRumxlsV01no8LUMX+yCkrTe5Cf2NwxHzygmladwYjSZpWVFVVevYJ5flrCMt2EWk6e\n",

"SgwQk3ntdlDV2oGV72aiXWvA35fHMoMfCITxBhGk3fjocCle31OAG6cF4a1bJtv12MrWdmTkNSIj\n",

"rxFnK9sYP0uArsMyR0HnRXoNWedz9zR+lI8QL12XiHlRQ5PGt4eB1KVapgT7qks9VdaK9w4WMzV8\n",

"HDYLN5iEaNgYNO7W6o34/kwV3j1QwvhjxvmJ8PSKOCyMHR2jGV/cmYutWRVYGOuNk2WtUOuMeHRx\n",

"FP66LHaklzYqKG9px+K3DoOigP1PpiLKp/fIPEXRnqhfn6rC1qyKfp3/uskBuH9BOJIDJT3qOUua\n",

"VNiSWYZfL9QydenRPkI8mBqBVVMCmei2o6AoCtXSTqvGyNw6ORoVtm9C/cROjDg134iOpebI4ebH\n",

"s9X4+0+XwWWz8MvD8zApyG2kl0QgOBwiSLvx0s48fJ5Vjg1pkXhmZd+mxAYjhYvVMiYVX9xtUlKc\n",

"n4jxB51k40NjqDAaKfx8vgav7S5Aq8lU/5pJ/vjn1QkOT+MPFqVaR1vV1F65LpVvqks1f4gl+Ish\n",

"69Dik8wynDKNgOSyWbhpehAeXhiFEM+xV29lNFLYebkOb+0rQpWUFuvBHs7469JYXDc5YFQ1kry6\n",

"Ox+bj5Qx36fFeOPztTNJStGCB7afRUZeI26fFYJXb7DPKF/eocPOy3S9Z7XUthG+JYkBYswM80B5\n",

"SzuOFDUz22eGuWNDWiQWxfoM+/OnWalhxKn5ZrTcNO2pO2InbjdT/9HXHDlSUBSFR745j13ZDYjw\n",

"csUfjy1wSCkHgTCaIIK0G49+ewE7L9XhuWsScP+C8B77O7R6HCtuwf78RhwsaEKLSsvs47JZmB3h\n",

"QYvQeN9hbzLpjrxDh7czCvGlKY1vHiF67/xwh0dIHEn3utQ8U8TFsuyhN16/MRlLE/yGzJB8qKAo\n",

"ip4OtrcQ+fUKAHQd82NLonDbzJBR+fd6c28h3j9UAoAWzTs3LrA5vWgic6qsFbd+chICLhvHn1k8\n",

"qFS1zmDE6XIpPj1axtRGX4mUaC+8dctkqxrRkUal0SPfwgs5t06Bosb+De0w16VOhKEd3ZF1aLHi\n",

"naNoUKgHdINDIIx2iCDthnn6zHu3T8V1k+npM00KNQ4U0NZMx0pamCYOgG4MWGSyZkqL8R6VBsa5\n",

"dXL867dcnDMZY0d6u+KlVUmYPwrS+P3FXJf64eES/HD2ylY1TF2q/+hPCZ6rlOL1PYU4bYryigRc\n",

"rE+LwL3zw0d1Q0jEP/5kJgPteiwFCQFjz7VgqKEoCte9n4XsWjmeXBqDx5ZEO+zcWr0R7x8sxnsH\n",

"S/r9mKsn+eOBlAhMDpKMqteCreZI89CO7piHdnS3opoIN0NZJS1Y8+kpAKRWmzD+IIK0G4vfOoyy\n",

"5nb8e1UiFGo9MvIacbFaZnVMkLszlib4Ymm8L2aGe4wJqxNbafyrJ/njn1fHw18y/F6I9kBRFA4W\n",

"NOG9A8XMNCkBl407ZofgxmlBaFFprD7IeqtLHW0pwcIGJf67txD782lvVD6XjbXzwvBQWuSon4i1\n",

"L7cBD355DgDduFL+6tUjvKLRy28Xa/H4dxfhJRQg65lFvY7s7C9KtQ7fna7GZ8fKGWN+kYCLNXNC\n",

"cevMYJwsa8UnmWW9psYtifOjJzFdnRww6qLwRiOFSmmHVSQ1t07B1FR3J9DN2armPCFAjACJ06gS\n",

"3o7glT/zsOVoOTxc+djzRMqoin4TCIOBCNJuJL+w12a36ORgNyyNpyOhsb6iMfsmJ+/U4e191mn8\n",

"x5ZE475RmManKAr78hrx3oFi5NbRaWwnHht3zQnFA6kRvb4Rm1OC5rrUvPreU4Ld61LplKBoSOuz\n",

"qqUd+N/+Ivx6oRYURUd8bp4ejMfToxEwAkbp9lLarMKq97OYEoqrk/3xwZppI7yq0YvOYETK64fQ\n",

"oFDjvzdNws0zggd0nialGluzKvDVyUrmPcpHJMD9C8Jx++wQiG10zBuNFM5WtuGTzFLGi7cveBwW\n",

"HkyNwD3zwkat0GlSqHtMnjLXW3fH3YXX7SZUjHAv4Ziuc9boDVj9wXHk1yuQFuONbffOHLOfRwSC\n",

"JUSQWkBRFCa9sA9KjR4CLhsLomhrpiVxPuNufN5oTuMbjRT25jbgvYMlTD2lC5+Du+aG4oGUiAHZ\n",

"ZNlTl2rpl2oZcRlsXWqLSoMPDpXg65NVTOfzyiQ//HVZLKJ8xoYllUqjx/UfZFk18KXH++LTe2aM\n",

"4KpGPx8fKcVruwsQ5yfC7sdT7BIQZc0qbDlahp/PdXXMR3q7Yn1qJFZNDbA74lon68QXJyqsGtL6\n",

"YkWiHx5Mi8DUYLdRK3wUah3y6xSMQM2tk6OkSQW9sefHmzOPgzh/UVck1V+MWD/RkDmfDAXFjUpc\n",

"s+kYNHojXrg2AWvn9+x3IBDGGkSQdiOnVo4mpRpzIjzHfRej0Ujhlwu1eHVX/qhI4xuMFHbn1GPT\n",

"gRIUNioBAEIBF/fMC8X9CyIc3qhkrku17AK+kl+qeUSqPXWpSrUOnx4tx6dHy5iauHmRnnh6RRwm\n",

"B7s59GcaSiw7fX1EAtw7Pxyv7ylAaow3tt8368onmMDIO3SY+9oBdGgN+Or+2Vbm871xoaoNm4+U\n",

"YW9eAzMtaXoo3TG/JM5xHfNqnQG/X7Se3tQXUT5CrB8i+yhHotYZUNyospo8lV+vRKeuZ10qh81C\n",

"lKkuNcEi5T8aewLMfHG8As//ngs+l40/Hl2AmDE48INAsIQIUgLknTr8L6MI209UjEga32Ck8Mfl\n",

"Omw6WIISU+RNJODi3vlhuG9B+LA3KzQp1aa6ta5I6kCsatQ6A74+VYUPDpVAahL8yYESPL0irl+C\n",

"ZLSx+UgpXt1dAB6Hhe8enItaWSce+/YC5kR44LsH54708kY9L/yei23Had/WbffaFvAUReFQYRM+\n",

"PlLGNLkBdBR6Q1rEsAxDoCgK501ieF9eY5/HxvrSEd/RZEfWFwYjhYrW9i5Df9Pr3Pz67E6whzM9\n",

"eSpAjMRAMRL8JfAVC0ZFpJiiKNy77QwOFzYjzk+E3zbOH3R9MoEwkhBBSmDIrZPj+d9ycdYijf/i\n",

"dUlDJp70BiN+u1iHDw6VoMwk+MROXNy/IAJr54eNquiEZV2qefJUb3WpXDarR6rQX+KE565JwMok\n",

"v1HxYWYvWSUtuOuzUzBSwL9XJ+GuOaHYk9OADV+dw7QQN/zy8PyRXuKop7K1HQvfpI3yM/6SajXC\n",

"Vqs3YuelOnySWcZkB3gcFlZPCcSDqREjPu62SaHG1uMV2HykFN2z4DkvLh/TY2IpikKDQt1j8lRN\n",

"m23vV09Xfo+61DBP1xER5U1KNVa8cxTSdi0eSAnHs1cnDPsaCARHQQQpwQqKovDL+Vq8ujuf8Vi9\n",

"Otkf/7zGcWl8ncGIXy/U4oNDJag0dcS7ufCwbkE47p4XZrM5YzRirku1jKZazvbuTqS3q5WfoiPq\n",

"UoeDmrYOXLvpGNo6dLhpehD+e9MksFgsHCpowr3bziApUIw/Hk0Z6WWOCdZ/eRZ7cxtx+6xgvHrD\n",

"JKg0enx3ugqfHStHvZzumBcKuLhjdgjumx8+6gZZmNHqjdiX14BJgW5jcgBFf5B36JBb3xVFNdel\n",

"2ihLhSufg3imnId+bUf7CoclYrk/rxHrtp8FgH6XgxAIoxEiSAk2sZXGf3RxNO5fMPA0vlZvxM/n\n",

"a/DBoRIm+uDhyscDKRG4a27omI6ynCxrxet7CnDBNLIVoCNc00PdUdrc3mtd6mgfoajWGXDzxyeQ\n",

"XStHcqAEP26YyzR/mD0RY3yF2PeXtBFeqTW1sk40KdSjzkT9TIUUN398AgBw+6xg/Hm5HgpTx7y3\n",

"SID75ofjjtkhoyo7QOhCrTPQk+UsJk8VNCig1hl7HMvjsBDlI7K6AY33F0E0BDfc//drNr45VQVf\n",

"sQB7Hk8d9bZxBIItiCAl9En3NH6EtytesjONr9Eb8OPZGnx0uBS1MlqIegn5eDA1AnfOCR3TzWM5\n",

"tXL8d28hM6rRicfG/QvC8WBqpJWosKpLre//CMUEf7p2LdJbOOx+txRF4amfLuPHczVwd+Fh56ML\n",

"EOTeFQ0zi6swTxcc/vuiYV1bb7Rr9HhnfxE+z6qAwUiBzQJifEVICpRgUpAEyYESxPuLR6yjuryl\n",

"HYvePGy1LcLLFQ+mRmD11MAx1elNoNEbjChvae9hRSXv1Nk8PszThWmaMrt4DNZiq0OrxzWbjqGs\n",

"uR0rk/zw4Zppo+amlkDoL0SQEq5Ib2n8Z6+O79M3U60z4Psz1fjocClj4O0tEmBDWiTumBUyqiJX\n",

"9lLR0o63Moqw81IdALpu9LZZwXhscXS/LcLsGaFo9ku17PKP9x9av9SvT1Xi2V9zwGYB2+/rmQq8\n",

"VC3Dqg+yECBxwvF/LBmydfQHiqKwN7cRL+7MZVLf7i48tHX0FAVcNgvRviJMCpQgOYgWqrF+oiFN\n",

"r16qlmFzZil253R1zAPAe7dPxTXJ/mOmKYjQPyiKQq2skxGntNWcHHWm52Z3vEWCHpOnQjxc7BKV\n",

"2TVyXP9hFvRGCm/cNAm3DNDvlkAYKYggJfSb7ml8Zx7djd89ja/WGfDNqSp8fKQUTaZUta9YgIfS\n",

"InHbrJAxHQVqUqjx7oFifH+mmmlcum5yAJ5cGoMwL9dBn99WXWpvfqksC79UR9elnqtsw22fnIDO\n",

"QOGZlXHYkBbZ45j8egVWvnsUXkI+zv5z6aCvOVCqpR14/vdcHCygjd+DPZzx0nVJWBTng0aFGpdr\n",

"5MiulSO7RobsWjlzU2UJj8NCrJ8IyYFuTCQ1xlc0KJcJiqJwpKgZHx8pxcmyrtri1BhvZJoi6m/c\n",

"OAm3zCTCYaIgbdd2mzwlR1lLO2x9CosEXMSby3n8u+pS+8qUfHi4BG/sKYQrn4Ndj6cg1HPw70kE\n",

"wnBBBCnBbvLqFPjXbzlWafwXr0vE9FB3fH2yCpszy5jxfgESJzy0KAo3Tw8a00JU3qnD5iOl+Dyr\n",

"nKkXWxjrjb8vj0VigGRIr200Uqhu67BKCebVKRix3x3rulT6g8yeutQmpRrXbjqGRoWmz/RfabMK\n",

"S946ApETF9kvLB/UzzgQtHojthwtw6aDxVDrjOBxWFifGolHFkX1Gn2nKAr1crVJoMpx2SRUbUVS\n",

"+Rw24v0t0/1uVxQEAN2098flOmw+UoaCBrpjnstmYZWpYz7WT8RYaMX4CrH3iVSSXp3AdGj1yK9X\n",

"Iq+uy8GjoEEJrb5nXSqfw0aMn5C2ogoUmybLieFqqr83GCncvuUkTpdLMTXEDT+unztio5EJBHsh\n",

"gpQwIGyl8S0JdHPGI4uicNP0oFFtnn0lOrUGfHGiAh8dLmVqwqaFuOGpFXGYE+E5omtrVmq6BGo/\n",

"61ITLDwVbdWl6gxGrNlyCqcrpIjyEWLHI/N7bTarlnYg5Y1DEHDZKHx5pcN/vr44UdqK537LYXxr\n",

"50R44OXVyQOaeGVOr5oFak6tHJdr5DZrAAVcNuL9xUwUdVKQG+M7267R4/sz9Ix5c620K5+D22eF\n",

"4L4F4VblLfJOHea+Shvlb79vFlJjvAf4myCMR3QGI0qbVT2sqGyNtTZnSsxRVHcXHp75JRsA8PiS\n",

"aPxlacxwL59AGBBEkBIGjFKtw/sHS7A503oEYbiXK/58bMGYblbSG4z44WwN3j1QhEYFHYmM8RXi\n",

"78vjkB7vM2ojWvbWpcb6iqy6/H88W43vzlRDKODit43zEendu8BrUqgx6z8HwGIBZf+5alh+Jy0q\n",

"Df6zKx+/nK8FQDfHPXt1PFZPCXTo9SmKQrW0E5drZUw0NbtWblMQ2MLDlY/7F4TjztmhkLjY7qo2\n",

"G+WTSVeE/mB+TubVdzVO5dbJmfen3lgQ5YU754SOOgcPAqE7RJAS7EbeqcMXxyvw2bHyXjtJI7xc\n",

"8cJ1iWMu8mM0Utid04C39hUyZv2Bbs74y9IYXD81EJwx2Hyi1RtR0qSySvf3VpdqxonHxhPpMUwT\n",

"ladQ0OMYWYcWU17KAAAUv7JySF0AjEYK356pwht7CiHv1IHFAu6YFYKnlsf1KviGYg2V0g6mHvWP\n",

"y/VMA1V3uGwWpoW4I9kUSU0OkiC8m3l6VWsH0t48BIoC9j6Rilg/MvqRYD8tKk2Pcp7eMiUSZx4S\n",

"/Lu6+y0nyxEIIw0RpIR+I+vQ4vOsCmzNKmciRZHernh0cTSumeQPDpuFXy/U4j+7Cpga0pVJfvjn\n",

"NQkI7KMbfzRAURSOlbTgjT2FyK6VA6CjXBsXRWHNnJBxN5Kve13qz+dqGScEW5jrUhO6NU8lPr8X\n",

"AJD74nKmjs3R5NbJ8c8dOYzHa2KAGC+vTsLUEPchud6VyK6R4+PMUuzOrrcySQ+QOMHfzRn59Qp0\n",

"aHvOSxcKuEgMMKX7g9wwKVCCV3fnY29uI26dEYzXb5o0jD8FYTyj0uhxplyKe7edYbbxOCybmRKB\n",

"2cHDojlytPn3EiYGRJASrkhbuxafHSvHtuMVTFQtxleIRxdH46pk/x5RQ4Wa7sb/4nhXN/7GxVFY\n",

"lxI+KoXdxWoZ3thTgOOlrQDour8HUiOwLiViTJv19xdZhxbXvn8M1dJOJAaI8bdlschvUFwx2uLK\n",

"56DdJLyeuyYB86M8HeqXqtLo8fa+Imw7Xg4jRQu6J5fG4O65ocMe0aEoCkeLW/DxkVLmeQLQjW0b\n",

"0iIxO9yDSYUajBTKmlVd3f21cuTWyW2ap1vy4nWJWBTrg2APklYlOIYzFVLcuvkEjBTwzq1TEO0r\n",

"ZF7XuXX0FKp2GzdPbBYQ6S20ugFNDBDDzYUY7hOGDiJICb3SqtJgy9FyfHmignnTivMT4bEl0ViR\n",

"6HdF78T8erob/0yFqRt/lKXxS5qUeHNvEfbkNgCgO1jvnBOKRxZF2kxRj0cMRgr3bTuDI0XNCPZw\n",

"xs6NC3p86Kg0ehTUK6zSgv2vSxUj3l9sVz0xRdFlEy/tzGOitldP8sdzVycM+yhNvcGIP7Pr8fGR\n",

"MuTXKwDQ6fjrJgfggdQIxPuL+32ekmYVU4t6uYZuUrHVSS1x5jFNU+Z0f6AbEamEgfHm3kK8f6gE\n",

"Emce9jyRYjUC2mikUCW1dvDIrVMwGa7uBLo59xCp/hIn8twkOAQiSAk9aFZq8ElmKb46WYVOHS1E\n",

"E/zFeGxJNJYl+Npl4k1R1KhL49fJOvHO/iL8dK4GRoruUr1hahCeSI9GsMf4nMvdG2/vK8R7B0vg\n",

"xGPjl4fmIyGgfwLLXJd61XtHAdDpaqVaD+UV/FLNNam91aVWtrbjX7/lMpOvQj1d8NKqJKQN801M\n",

"h1aPH85UY8vRro55Fz4Ht80Mwf0p4Q557uoMRhQ3qvDq7nwcLW7p81gPV76VQJ0UJIGfmAgBwpXR\n",

"GYy46aPjuFQjx7xIT3x1/+wrvoc3KdTWdan1ClS2dtg81t2Fx9jLmV/b4V7CMVlvTxhZiCAlMJQ0\n",

"KfHF8Ur8cLYaGlPkZlKQBI8tjsaSQXaWm9P4209UwmCkRiSN39auxYeHS/DFiUomMrU0wRd/WxY7\n",

"IRtK9uU24MEvzwEA/nfrZFw/Ncjuc0x6YS8Uaj0O/DUN4Z6uTF2qZZd/X36p5mhLlI8Q35yqwqny\n",

"LgP5RbHe2Lg4GkIBFxw2C1w2i/6XY/qXzbbebvp3MM9TabsWXxyvwPYTFYw3qacrH/fOD8Odc0KH\n",

"JGWpNxiR9t/DqJV14t+rkzA12M2U7qc7/AvqlcwQBku8hAIkB4qZetTkIAl8+zkljDCxKGtW4er3\n",

"jqFTZ8D/XRWHB1N7Drq4Egq1DvlMdz/9+i5pUtl8bjrzOIjzF1lFUmN8RWPai5ow9BBBOsExGikc\n",

"LmrC1qwKqyjNlGA3PL4kGgtjvR0ahemexg83pfGHMgLWrtHj82Pl+CSzjIngzQr3wNMr4jA9dGQa\n",

"Y0aa0mYVVr2fBZVGj7XzwvDCdYkDOs+Ml/ejRaXB7sdTek1fNys1JsPvK3cBOwJON4HK49gWroyg\n",

"5bBQJ1P3mqZcHOcDVwHXxuNZ4LDZFgKZPqfl91bH9RDUXds/zypnXn8/baDNzM3HG4wUSppUyKtX\n",

"MJZere09vX8BwEckYEz8k4PESA50g7doYpSfEPrm29NV+Mcv2eBxWNjxyHyHDPRQ6wwoblRZRVJ7\n",

"a+rjsFmI8hZaDexICBBD4jw8LhmE0Q8RpBMUpVqHH8/WYPuJClSYUjEsFpAe74t754VhbqTnkKUD\n",

"KYrCjou1eOXPrjT+ikQ/PHetY9P4Wr0R356uwqaDxYx5f7y/GE+tiMXCGMcK7bGESqPH9R9kobhJ\n",

"hVlhHvj6gdkDbkSa/9pB1Mo68dsj8zE52M2uNRwrbsaGr8732Bfu5QqDkYLBSEFvNJr+pWAwUNCZ\n",

"vrdVv0roHxJnHnxEAgtxzO5dbJuOsRLVnD7EttV+G+ft9Xpsi+tY3yzYvInosQ422CxM2Nd0f6Ao\n",

"Cg9+eQ4ZeY2I8hFi58YFQ9JJbzBSqGht7zL0N0VUpb3cRAV7ONOTp0wDOxL8JfAVC8jfcgIy/luI\n",

"CVaUNauw/UQlfjxbzTQqiZy4uG1mMO6eGzYsNZQsFgvXTw3CknhfvJNRjC9OVGBPbgMOFzXh0cXR\n",

"g07jG40UfrtUi7czilAtpev/Qjxc8NdlMbh2UoBdNbDjDYqi8NRPl1DcpIKPSID310wdVFe8eQqX\n",

"1tB3B7klBiNdV/zGngIA9I3QXXNC8ddlsXZFS4xmodpduFoIWFvb9QYjMoua8cHhUhi6pRvXzA7B\n",

"zDAP5pzM4wwW57XcbrXfxnbz8Ybu263XpTNQTNMUQDeP9HW97uu2B3mnrlf/4LFOTwFsOzreM2re\n",

"DwF8xXIRG9Fxjm3x3Zuo7n6tXoU9m93jxuBKAo7FYuH1GyfhYnUmSpro2uWXViU5/G/AYbMQ6S1E\n",

"pLcQ100OAEC/7zQo1MzkKbO5f01bJ6ql9Je5uRSgy2S616WGdfPxJYw/SIR0AmA0Usgsbsa24xU4\n",

"XNjMbI/yEWLtvDBcPzVwyDwk+0NBgwL/2pGL0xV0/eBA0/gUReFQYRPe2FPIzBD3Fgnw2JJo3Doj\n",

"eEyPMHUU5hnqPA4L3z04d9AlC8v/l4nCRiW+Xjcb86O8rnh8Tq0cz/6ajUs1tNdrcqAEr1yfhElB\n",

"boNaR3/QG4zYldOAzUdKkVtHiz8Om4VrJ/njwdTIfjd0DRXV0g6k/fcQjP0wyqcoW8LXQuiaBLBC\n",

"rcOlGjkuVLXhYrUMZc1XLpWI9RUh3l9EuyMIuDAY+hDajPDvRbDbuikw9HETYd7e45xdx5PouG26\n",

"l6r0VirS/TkwI9S939FyDocFXm/iux+lKd0Ft0pjQFGDEgUNShQ2KpgAQm+Ee7liUhA9sndykARx\n",

"/mK48DhEqI4TiCAdx6g0evxyvgbbjlcwb0IsFrA41gdr54dhQZTXqEmLZNfIselgMfblNTLb7Enj\n",

"n6mQ4o09BUxtqsiJiw1pkbh3ftiYHmHqSLJKWnDXZ6dgpIB/r07CXXNCB33OazcdQ3atHFvXzsSi\n",

"OJ9ej1OqdXhrXxG2n6C9aUUCLv62PBZ3zgkd8m7cTq0BP56rxpajZcwHnjOPg1tnBuP+BeGjylnh\n",

"4a/PYVd2A26ZEYQ3bpo8JNdQqnXIqVUgp1aOy6apUxW9dFCHebogOciNbp4KdENSoBgip5Gv+est\n",

"Om6/ALYVve4pqm1t19mKihtsPN4B17P8GQYRHJ8wSJx5NspIeq8ltymeB1OawmaB00t03O7SlCtG\n",

"5gfXyDmaIJ/U45DK1nZ8cZxOy5ubeEQCLm6eEYy754YizMt1hFdojVKtw+oPs3qkIffkNjBpnJVJ\n",

"fghyd4aPyAk+YgG8RQL4iJygVOuw6WAJDhY0AaCnjqydH4aH0iKJibMFNW0d2PjNeRgp4KbpQbhz\n",

"dohDzmuOOmts+GkCdCTvj8v1+PcfeUy3/bWTA/Dc1fHwGeKO8LZ2LbafqMQXJyqY+jUPVz7umRuG\n",

"u+eGwt119D0/7l8QgV3ZDdhxoQ5/Xx43JA1JIice5kZ6Ym6kJ7NN3qlDLiNQaa/UKmkHKlrpr52X\n",

"6phjI7xdGQuqSUFuSAwQD3uGhc1mgc/cyEyszm2jkYKB6i6CexHbPQQufWyHxoB1288y53z/jqld\n",

"ddt9iepeS1OMNsR0/24ObN5EMMfT2zV6o81u/t4YryUpvWErOm4uF5kX6YW3bhmam1tHQwTpOME8\n",

"+nJbVgUOFjbBHPeO8HLFPfPCcOP0oFE7dUgo4OKOWSH48mRlr8fszmnodZ8lGr0Rm4+UYfORMgB0\n",

"WUJSgBhJgRLE+IrgJ3GCj0gAiTNv3NxVXgm1zoCHvjqPtg4dkgLpsZuO+tn5nN5rSCta2vHcbzlM\n",

"93i4lyteWpWIlOih9RStlnbgs2Pl+P5MNeOjG+zhjAdTInDT9OBRPRJxeqg7poa44UKVDF+erMST\n",

"S2OG5boSZx7mRXlhnkXZRVu7Fjl1tIl/jsnMv1bWibLmdpQ1t+O3i7RIZZmm+kyy8EhN8JeM6t/z\n",

"WIbNZoENFgbqoGQ0CbxvH5iDNZ+ehJECZB063OmAjMlQQ1EUjBTo+m4DbeqfXSPHpRoZMxmtL5x5\n",

"HMT4iRDnK0KsnwgBbs4wUv2MXvdVmmIjOt6nsO92vV5FvMF6e2+a3HwOW21jsg7bzWSjEZKyH+N0\n",

"aPX45Xwtth2vQEmTitm+MNYba+eFITXae8zU1+TUyvHG3kJkFjX3eVyIhwt4HBaalBoo1T2N2AdC\n",

"gMQJSYESJAXS5u3+bk7wETnB05U/Zn5/tqCbmC7jx3M1cHfhYeejCxDk7rgU9T2fn8aRoma8efNk\n",

"3DSd9jFV6wz4+EgpPjxcCq3eCD6XjYcXRmJDWuSQ+hDm1snxSWYZ/rhcz0TbEwPE2JAWiZVJfsM+\n",

"bnSg/Hm5Ho98cx4ernwcf2bxqPJubFVpkF3bJVCza+Wol6t7HMdmAdE+IiQHdZn5J/iLR9XPMtow\n",

"GCmodQZ06gzo1Bqg1hmg1hnp703bNHr6X/M2tc5IP0Zr/t7AnEOtMzLn6ey2vTvOPA7OP7d0XNxE\n",

"SNu1Vj7IuXVylLW0w5bSEQm4iDdPlfOnm6iifR03/tjR9BUd1/USLXcVcBE+yrKivWFXyOyxxx7D\n",

"77//jsrKSly4cAFTpkwBACxbtgwNDQ1gs9kQiUR47733MHXqVABAcXEx7rnnHrS0tEAikWDbtm1I\n",

"TByY5yGhi2ppB7afqMD3Z6qhMIkyVz6HSctHeAtHeIX2kxQowfb7ZiGrpAWv7S5g7nYFXDYoqisK\n",

"16RUY+OiKDyQGgGjkfa5bFKqUdHaQb8J1SqQUye36YXXG3VyNerkaqsaVlu4u/AY4ZoYIEaIhwt8\n",

"RE7wEvJHpeD55nQVfjxXAzYL2HT7NIeKUcCiy96Usj9a3Ix//ZbL+IymRHvhpVVJQ/aGSFEUTpS2\n",

"4qMjpVY+uinRXlifGon5UUNnXzZULE/0RaCbM2plnfj1Qi1un+WY8gpH4CkUYGGsDxbGdtULNys1\n",

"FgKVjlQ1KTUobFSisFGJn87VAKDTijG+Iisz/zh/0bANxhgoOgMtCtVaC6FnJRoN3USjsZtoNDCi\n",

"0fxYK5Fo2m6PU4Wj4HPYcOKxMSnIDTzO2Hqd9IaHKx8Lor2wILor2t+h1SO/Xom8egXyTEK1oEEJ\n",

"pUaP0+VSnLYYyMHnsBHjJ6StqAJpsRrnN/xlKbYYbHR8tGNXhDQzMxMRERFYsGABduzYwQhSmUwG\n",

"Nzc3AMCvv/6KF154AZcuXQIALF68GHfffTfWrl2Ln376Ca+//jrOnDlj1yJJhJSGoiicKGvFtqwK\n",

"7M9vZML3oZ4uuGduGG6aEQTxKGg4cARGI4VdOfV4c29hnw0XL1yXaPXh2Bs6gxEtKg2aFBrUtHUi\n",

"r16O7FoFcmvlvZqMDwYnHhtJAV3CNdJHCB8RXfs6XB/A5yrbcNsnJ6AzUHhmZRw2pNk/neVKPPLN\n",

"eTqitygSVdJOptbQRyTAv65NwNXJ/kMiCA1GCntyGrA5sxSXTR37bBZwzaQAPJgagaTAwZt+jySf\n",

"Hi3Dy3/mI8pHiH1PpI65KH2jQo3sGromlRarMsYL2BIehxapZjP/SUF0ac2VHDEoik47d48Gdo8S\n",

"9ifSaCUStQao9QZ0arvOPRiLrYHixGPDmceBM48DJ9OXM9/8PZv+3rSN2c/jwNm8r8d2Dpz5bAi4\n",

"lufhTOjxnjqDEaXNKsaKKrdOjrx6hc2sm+X4465oqu3xx4SBM6CUfVhYmJUgtWTbtm145513cPHi\n",

"RTQ1NSEqKgpSqRRcLhcURcHf3x/Hjh1DVFRUv6830QVpp9aAHRdrsS2rAoWNSmZ7SrQX7p0fhoUx\n",

"PmPuA6u/6AxGfHemGu/uL+51ks6yBF88d02CQ7qljUYKbR1aNCk1qJd3Ir9eiZxaOjVZ09a3JclA\n",

"SfAXIymQrnONZepcnQaVPmtSqnHtpmNoVGiwMskPH66ZNiTC8PHvLjC1hAAtCu+eG4a/LosZkm5s\n",

"tc6AH8/V4NOjZcxsbSceG7fOCMa6lIhR1TE/GBRqHea9ehAqjR5b752JRf246RoNGI2USdAZoNZb\n",

"p4zLW9pxulyKMxXSXuei24LNAoI9XKA3UF0iU2+wmYIdStgsMCLQWth1E4jcLkFo3m/9fZdA7Cka\n",

"ORBw2WMuqj9eoCgKNW2dFul+Wqg2Knoff2z2SU0widUgd2fy9xsgDotB33333Th06BAAYNeuXQCA\n",

"6upq+Pv7g8ulL8NisRASEoKqqqpeBalGo4FGY/3HNxj6n3odT9TKOrH9RAW+O13NdA068zi4cXog\n",

"7pkbhmjf8T9/ncdh4645obhhaiA+O1aOzUdKGUN/M/vyGpFZ3IxHFtJp/MHUqbHZLHgKBfAUChDv\n",

"L8biOF+bx1EUBaVGjyaFBo0KNQoalMitlSOnTo6iRpXNx/RGXj09cu+HszV9Hhfh5YrEQAmSTKP3\n",

"/CXO8BULIBRwrd4AdQYjNn59AY0KDaJ8hPjvzZOH5A3yco3MSoxODpLgleuThyQ6KevQ4ssTldh2\n",

"vIKJaLu78HD33DDcMy8MHqOwY34wiJ14uHVmMD47Vo7PjpYPWpDqzWlnnbFH9LB7faHtSKMRan1X\n",

"2rq3+sXe3BYGg5FCnwKWx2HBicuBE59jEVVkd4sqdhOCPURjl0C0Fo3mx7LB5xChON5hsVgI9nBB\n",

"sIcLViT5M9tbVBpGnFqOP25QqNGgUOOAyeUFoBsEzRFUs7l/pLfrqCzpGm04TJBu374dAPDFF1/g\n",

"6aefZkSpvbz66qt48cUXrbbNmTNn0OsbK1AUhdPlUmw7XoG9uQ1MWj7Ywxn3zA3DzTOCJ+TsX1cB\n",

"F48ticaa2SF4/1AJvjpZaWWQrdYZ8VZGEX4+X4Pnr0sc8ogSi8WC2IkHsRMPUT7CPk3hO7UGNCs1\n",

"aFSqUdyoQk6d3CReFXalA8ta2lHW0m5lwXMlbpkRhNq2TviIBHBzcYyzgLxTh7f2FVq5Ini48vHL\n",

"w/MdngKslXXis6Pl+O5MFVMTHOTujAdSInDzjKAx7TFLURS0BqNNYdepMyDUk472HitpwT93ZCPM\n",

"09UqpWwzPa03dhON9NdImMnzuewekT9nK9HYJQQtv29RaVDSpEJRo7LXyJSZyUESTA1xN1lQSRDh\n",

"LZzQaWjC0OAlFCAtxttqWItKo0dBvcJKqBY1KiHv1OFEWStOlLUyxwq4bMT5iZgoqrkudTw0kTkS\n",

"h6fsAcDZ2Rk1NTUwGAx2p+xtRUife+45vPvuu/Yuc0yh1hnw+8U6bD1eYTVCcH6UJ9bOC8fiOB/y\n",

"RmtBtbQDb+0rxG+X6mym7hyZxh8uLOtcy1pUjHl5bp0CKo1j3AQskTjz6FKBAAkSA+m7+L6cBSiK\n",

"wu+X6vDvP/J7lE+sT4vAP1bGO2xt+fUKfJJZht8v1TGiPcFfjPVpEbg62X9Iow3m+kTbjSm9N6X0\n",

"rEOkj9H0Ub84EibnzhaRQwGvu2g072Ojv/WLXcexrc7jqPcro5G29zGb+NNd/rZfEy58DhIDxEw9\n",

"alKgBBFeZOQkYXjQ6o0oblIyUdS8Ojr7Zeu5+pf0GDyeHj0Cqxy9DDq8IJPJ0NHRgYAAembtjh07\n",

"4OnpCQ8PD7BYLEybNg1fffUV1q5di59//hlBQUF91o8KBAIIBNaFwhzO+L2LqJd34quTlfj2dDVj\n",

"3u3EY+P6qUFYOy+sz/GBE5lgDxe8c9tUPJAagTf2FOJIN6uofXmNOFLUzHTjjwW7GR6HDX+JM/wl\n",

"zpgc7Ibrp9o+zrLOtbK1A3l1dI3rocK+7bK6I+/UIaukFVklrX0ex+ew4SLgQNbRZTbtyufgozun\n",

"42RZK2PvNFgoisLJMik2Z5ZajbidH+Vp6pj3glpngKxTZyHsjDZEYy/NKlbH9d4pbcsWZ6hhswAX\n",

"PreHsCuoVzLd1/MiPRHq6dKjftHZQjT2Vr9oPmYs1iey2SyEebkizMuVmY1uNFIob21nTPyza+SM\n",

"s8aZijZmYhtA+xwnBogZgTopyA2hHi5EpBIcDp/LNjU+dZUtmW+ocq2sqBRIHOFRxaMRuyKk69ev\n",

"x59//omGhgZ4enpCJBLhwIEDuPnmm9HZ2Qk2mw1vb2+8+eabTPS0sLAQa9euRWtrK8RiMbZu3Yrk\n",

"5GS7FjnempooisK5yjZsPV6BPTkNTAQo0M0Zd88Nxa0zg8mUITs5XtKC1/YUMB3XloSauvHHSmPI\n",

"QJB1aHHt+8dQLe1Eaow3tq6dCTYLTJ1rTVsH8uoVyK1VMFN4hgJXPgeRPkJEegsR7uUKD1c+RE5c\n",

"GIxUr3WH7Rp9r5FuABA7cUfcFsfJKqrYFUE0i8Ar1S9aiUbLDmrT43mc3sf/3fBhFs5XyfDo4ij8\n",

"dVnsMP8Gxg4GI4XyFhUu13R5pObWyW3eYIicuMy0qeQgCSYFuiHYgzSjEIYPo5EiN0XdIMb4w4hG\n",

"b8Afl+qx7XiF1USJ2eEeuHd+GNLjfUnh8yCgKAq7shvw370FNq2ilib44l9jLI3fHwxGCvdtO4Mj\n",

"Rc0I9nDGzo0LIHHmMbY4ltFAOoVs7Zuo1hsha9eiUtqB8pZ2nK9qG/YOZnvpXo/IiEQr0WjZ+czu\n",

"Jhp7pqKtRSP9mNHwetyVXY+Hvz4Pdxcejj+zhNSd2YHeYERpczsum1L92bVy5NUpbDZfSZx5FgKV\n",

"jqaSjmkCYfgggnQYaFSo8fXJSnxzuorx4hNw2Vg9JRD3zAtDAgndO5S+rKIEXPaIpvHNtji9pox7\n",

"qTu07HDunoo+W9lmdQ0XPgeduuG3xRkqQj1dMCPUAzPD3JEUKEGwhwvETtwJIxT0BiMWvnkYNW2d\n",

"eOX6JKyZPfpHPI5mdAYjihtVyK6VMen+fIvSCEvcXXiMiX+SqXHKX+I0YZ57BMJwQgTpEHK+qg3b\n",

"siqwK7seelNa3l/ihLvmhuK2mSHjzqpmtNGu0ePzY+XYnFnWo6i8expfbzD28E3sOZKvr0ijsZto\n",

"NKDTIj1tbnIZClucK8Fhs+BiTg/bMtw2RQV5HBZ+PFdjJWQFXDb+76p4eAkFXVFEi1T0T+eq8cGh\n",

"UiyJ88Gn98xgPqjNda6NCg1KmlXIqZUjI6+RmeDkaEQCLhJNDVpJgRLE+ongJ3ZymLPASPPZsXL8\n",

"+488RHq7IuMvaSTV52C0eiOKGpXItpg4VdigtOlO4CXkW6T76eYpX7HTCKyaQBhfjF3PlFGKVm/E\n",

"rux6bD1egUvVMmb7zDB3rJ0XjmWJvqN2Tu5og6Io6AyUdWOK3oZI7MU30SwaEwLEVqPhANrX8N6t\n",

"9k0MczRmW5zeGlNsdS9bish6eSc2HSwBAMT7i/HaDcld9YoWVjr9eb5dqGrDP3fkMGJ0SrAbXrk+\n",

"yao43xYhFuUPlsLP0s+Vw2bhcGETqi3qVuP8RNiQFomrJ/mjU2dAk0KD8pZ25Jgm++T0YUZtC6VG\n",

"j5NlUpwsk/Z5HJfNYrxckwLp+eoBbs69OguMFm6ZEYR3MopQ2tyOI0XNWBQ3fuuhRwI+l82MBL59\n",

"Fr1NozegsEFJC1RTTWphoxItKi0OFTZbNRH6iARd6X5T85SPiIhUAsEeiCB1EM1KDb4+VYmvT1Wh\n",

"WUl/kPI5bFw3JQBr54WN+VGGlnS3xbGOKBq7dSz3tMvpj2/iSNri2Go66U0gWtcrsnuIxi6BaW26\n",

"PdixfSqNHtd/kAUAmBXmga8fmD2gGx15hw5v7C3AN6erQFF0A9EzK+Nx28zgfgk0ZpZ9t3Sn2U93\n",

"c2YZDlqYRs+N8MT6tAikxXgzApbHYTN+rksTbA8iAGhrtCaFBpXSduTWKRjx2ttoWVvojRQuVcus\n",

"bhZ7I9ZXRHsGmgRsiKcLvISCEbmhFDnxcNusYGw5Wo5Pj5URQToMCLgcTApyw6QgN2abWmdAfr2C\n",

"SfVn18pR1KhEk1KDAwVNVgbpfmKnrnpU079k1CSB0DtEkA6SyzUybMuqwM7LdUx6x1cswF1zQnHb\n",

"rBB4DeMbkMFIdbO26cs3kU4p92aXYy0ae05oGW4sx/Z1H7fnZGpa6W0qS/cml/KWdrx3sLjHzGKh\n",

"gIv3bp/S63Sm0QJFUXjqp0soblLBRyTA+2um2i2SKIrCjou1eOXPfKau+YZpgUx6vr/wTZZs5lIE\n",

"o5HCvrxGbM4sxYUqGQB6DvTKJD+sT43E5GA3u9ZpiROPgxBPF4R4uiAl2rvX48x+rrVtncirNwtX\n",

"2g/QHgoblShsVOKXC7V9Hhfk7oykADo6lhggRqS3ED5iAQRcx9Yo3zMvDJ9nVSCrpBV5dQpSez4C\n",

"OPE4mBrijqkh7sy2Tq0BefW0QL1sEqolzSp6ik+eGhl5jcyxgW7OTCTVnPZ3J6VbBAIAUkM6IHQG\n",

"I3bnNGBbVjnOmz50AWBaiBvWzg/HyiQ/K4GgM1gIv26+iZ263ptVLCONmm71i7YijY7wgrQXHofV\n",

"Y9yek8lYu6do7DmVxaZJtw0/xb5scQbK8dIWvL67AJe6WUUtjPXGv1cljdpu/M1HSvHq7gLwOCx8\n",

"9+BcTA91v/KDLChpUuG5HTnMJJEoHyH+vSoJcyM97V5LRl4jHth+Fgn+Ytw9NxSfZJahzFQnyuey\n",

"cfP0IDyQEoEwL1e7zz3UmOtc6+VqkyUWPT0rp1Y+JLW+XkI+EgMkSAoUIzlQghhfEfwkTnZNm9r4\n",

"zXn8cbkeN04Lwlu3THb4GgmOoV2jR169wpTul+FyrRzlLe02Gw2DPUwi1WzmHyCBxGXiTeMjEIgg\n",

"tZMvT1Tg/UMlPerbJM48hHm6WDW5mJte9COQdzbb4lgLO3Y30WjbE7E/U1nMVjqjwRZnMFAUhd05\n",

"DXj+91ym1MLME+nR2JAWOapM9bNKWnDXZ6dgpIB/r07CXXP633Gt1hnw/sESbM4shc5AQcBl47El\n",

"0XggJYJJvdvLH5frsPGbC1bbxE5cZsa8t2jspygpioJSo0ejXI1CU+NLbq0COXVyq2EBjsKVzzGV\n",

"CdDiNSGArnMVCbi4VCPH6g+ywOOwkPX0YviQZpoxg1KtQ26dgomk5phEqi1CPV2YcajJgW5IChRD\n",

"5EREKmF8QwSpHbSqNJj+8v4BP55lSjt3n6JiKRrNwtGWQOweRex1tB+XM6obNEYjOoMRP5ytxrO/\n",

"5vTY9/naGaMijV/T1oFrNx1DW4cON00Pwn9vmtTvqPGhgib86/ccVEs7AQCL43zw4nWJA44CN8jV\n",

"+DyrHJ9kljHb/CVOuH9BOG6bFQKhYGJWA6l1BjQq1Chpoke/ms3Z6+XqIbleciAtWhNN7gKhHi7j\n",

"xllgIiDv1CHX5I9qTvf3NrQiwsvVKtWfGCiZsK8zwviECFI7oCgKP52rQVlLe6/1i1b1it0ijWNx\n",

"bN9Eo0Orx2dHy/FWRpHVdl+xAD9tmDdiaXy1zoCbPz6B7Fo5kgLF+GnDvH5FbuvlnXhpZx525zQA\n",

"oEXj89cmYnmi74Cei8WNSmzOLMNvF2t7WOIUv7KSOEj0E3Oda3mzqUGrjo6YlTYPjS1WpLerSbzS\n",

"Yw0jfVzh6Spw2Lx5guOQdWiRU6vA5VoZHU2tkaNW1tnjOBYLiPQWMgJ1UpAECQFiu0pACITRBBGk\n",

"BIINpO1avLGnAN+dqbbafsPUQPzHZK80XNBNTJfx47kauLvwsPPRBQhy71sY6w1GbDtegf9lFKFd\n",

"awCHzcJ988PwRHoMXAcQVTlTIcXmI6XYn9/VRTw73APzo7zwdkYR/MROOPl/S+w+L6FvzHWuleZZ\n",

"2LVyXKqRI9/OBq3+EujmjMQAMSNeY/xE8BGNjLMAoQtpu9bU2S/D5Rr65qXORtSdzaJrws31qMlB\n",

"tLXZaCo7IhB6gwhSAqEPqqUdePjr81ajXgHgjRsn4ZaZwcOyhq9PVeLZX3PAZgHb75uNBdFefR5/\n",

"rpL2FDWLlmkhbnjl+mTE+9vXlW00Utif34jNmWU4Z5oGxWIByxP8sD4tAlND3FHYoMTydzLh4crH\n",

"+eeWDuwHJNjN1qxyvLgzDxFertj/ZBpYLNqLtbatk7HEyq2j3QU6dQaHX9/DlY9Ek5drUgAdmfOX\n",

"OBHhM4w0KzXIYYz8aTN/W969HDYL0T5CUz0qbeYf5ycifyvCqIMIUgKhH+TVKXDVe0d7bN/9eIrd\n",

"Qs8ezlW24bZPTkBnoPDMyjhsSIvs9VhZhxav7ynAt6fpqK6bCw/PrIjDLTP65ylqRqM34LcLddic\n",

"WcqkkPkcNm6cHogHUiIQ4S1kji1vaceiNw9DKOAi58XlA/wpCfai0ugx99UDUKr1+OyeGVgS3/8a\n",

"Z7XOgDpZJwoa6AYtWrwqIG3XOnydTjw2Mz3LLGBDPV1IWnmIaFKoLaZN0f92H58M0AMiYv1EjIn/\n",

"pEA3xPqJBtzcSCA4AiJICQQ7OJDfiPu/OGu1zc2Fh8ynFkHs4C7YJqUa1246hkaFBiuT/PDhmmk2\n",

"6z4pisLP52vxn135jKi4eXoQnlkZZ5cRt0KtwzenqvD5sXI0mRwHRE5c3DUnFGvnh9mcPFMr68T8\n",

"1w6Cz2Gj6JWVA/xJCQPhP7vy8UlmGeZGeOLbB+c4/Pw6gxHNSg0KG5W0JZapSctWPaMjSAwQM84C\n",

"iYESRHoLIXbikrr7QUBRFBoUasbE3yxUbd188DlsxPmLTAKVTvfH+IpIuQZh2CCClECwE4qi8P7B\n",

"kh6NT9dNDsA7t05xiMOBzmDEmi2ncLpCiigfIXY8Mt9mR21xoxLP7shhRqPG+Arx8upkzAr36Pe1\n",

"GhV0x/w3J6ug1NDDAvzEdMf87bP77phvVmow8xXaeaL81auIeBhGamWdSH3jEAxGCn88umDEpsEZ\n",

"jRSkHVqTs4CcKRkoblINyfUivFxNYz5pARvjJ4KnK5889/oJRVGok6uZetRsU5e/LQszPpeNeH8x\n",

"I1CTAyWI9hGOebs/wuiECFICYYDoDEbc8/lpHC9ttdr+8uokrJkdMqgPyBd35mJrVgWEAi5+2zgf\n",

"kRZpcoCeDvPewWJsySyD3kjBmcfB4+nRuH9BeL8jGiVNKmzJLMOvF2qZ0Z/RPkKsT4vEdZMD+pW+\n",

"k3fqMPnFfQCAwpdXOHw6EaFvHv32AnZeqsMNUwPx9q1TRno5fWL2cy1vbje5CihMda7yIRkR7Cd2\n",

"YiyxkgPpOldfsRNxFrABRVGoaeu0qke9XCPvMc0OoMswEvzFmBTkRkdTg+hoNvm9EgYLEaQEwiCx\n",

"jBJa8vND8+yeogQAOy7U4onvLwIANt81HcsT/az2H8hvxL9+y2VSp+nxvnjhuoQrdt6bOVfZho+P\n",

"lFqNNJwV5oH1aRFYFOtjV4RXrTMg7rk9AIDsF5YR8+5h5mK1DKs/yAKXzcKxpxfDTzI+jPLVOgOq\n",

"pB3M2NecOjlya+Vo1zq+QUvizGOirYkmC6Ugd+cJn6qmKAqVrR1MBPVyjQw5tQqoND1FqjOPQ/8O\n",

"Lcz8I7xciR82wS6IICUQHMSZCilu/viE1bZ/Xh2PdSkR/T5HXp0CN3yUBbXOiI2LovC35bHMvlpZ\n",

"J178PRf7TEIy0M0Zz1+bgGXdBKstjEYKBwuasDmzFGcqujrml8b7Yn1a5ICEs/m8Ef+3CwBw7p/p\n",

"dtWsEhzDzR8fx5mKNjy8MBJPrYgb6eUMKzqDEQ1yNVMmYI682mrkGSx8LhtJFs4CiYFiRHoLJ1S3\n",

"utFIoaK13aoetbcbBfPEMct0f5gnEamE3iGClEBwIBRF4ZPMMry6u4DZtjjOBy9cm4gQz74jmLIO\n",

"La59/xiqpZ1IjfHG1rUzwWGzoDMYsTWrHP/LKEanzgAum4X7U8Lx+JLoK3Yra/VG/HaxFp9kljE1\n",

"fXwOG9dPDcQDqRGI8hH2+fj+EPV/u6A3Ujjxj8XwlzgP+nwE+9iT04ANX52DxJmHE/9YTDrYbWA0\n",

"Umhp1yC/XmmKutLi1Ty5zNHE+4tNTVq0gI3zF4/bqUoGI4XyFlVXur+GriO2ZTcmEnCZKKr53xAP\n",

"F1L/SwBABCmBMCQUNCiw4p0umyg+l42H0iLx0MJImxEVg5HCfdvO4EhRM4I9nLFz4wK4ufBxtkKK\n",

"Z3/NQWGjEgAwM8wdL69ORqyfqM/rK9U6fHu6Cp8fq0CDgjbQFgm4WDMnFPfOD4OvA2egJ/xrDzq0\n",

"Bhz5+0KEero67LyE/mEwUlj05mFUSTvw71WJuGtu2EgvacxCURQUnXoUNioZ0Zpbq2Bef44m1NOF\n",

"scVKChQjwV8Mj3HQoKU3GFHa3N5l5l8rR16dAhq9scexYieuVT2quWRirP8OCPZDBCmBMERsySzD\n",

"K7vyrbYFezjj+WsSkZ5g7Rv59r5CvHewBAIuG788PA8BEme8trsA35+lPUXdXXj4x1XxuGlaUJ8p\n",

"ryalGluzKvDVyUqmIcFHJGA65h1tTQUAU17aB1mHDhl/SUW0b99CmTA0bMsqxws78xDu5YoDT6aR\n",

"tOgw0Kk10M4CdeaIKz1JSz8EHVo+IoGpVMBUMhAogb/EaUyJNp3BiJImFT0OtVaG7FoF8usUTEOl\n",

"Je4uPKt61OQgCQLG2M9LsB8iSAmEIUJvMOL6D48zU578JU6oN437WxLng+dNafyMvEY8sJ32Nn37\n",

"lsnQGyi8ujsfbSYblltnBOOZlXFwd+X3eq2yZhW2HC3Dz+e6OuYjvV2xPjUSq6YGDGn3+6xX9qNJ\n",

"qRlR66GJTrtGjzkmo/xP757R44aHMHLoDEaLBq2uJi1bHeyDReTEZbxc6WEEEoR7uY7aDnit3oii\n",

"RiXTOJVdI0dBgwI6Q09Z4unKR3IQXZNKi1U3+IoFRKSOI4ggJRCGkNw6Oa57PwsGI4V3b5uC/Hol\n",

"PjtWBp2BAp/LxvJEP+zJqYfOQGFepCd0BiPTdBTnJ8LLq5MwI6x3T9ELVW3YfKQMe/MaYH4lTw91\n",

"x4a0SCyJs69jfqAseP0gato68cvD8zAtZGDNUYTB8+rufGw+UoY5ER747sG5I70cgp0YjRTqFWp6\n",

"CIG5SatWzgypcCQcNss64hogQYyfcFTYtmn0BhSapohl19DNU0WNSpuRZ2+RwEKg0s1TtgZ4EMYG\n",

"RJASCEPMa7sL8PGRUviJnZDxZCoaFRq88HsujpW02Dzehc/BX9JjsHZ+mE3rGYqicKiwCR8fKWMM\n",

"8QHa/mlDWkSfAnYoWPzWYZQ1t+O7B+dgToTnsF6b0EW9vBMprx+CfoSN8glDC0VRkLZrkVevYKKt\n",

"ObVyVLZ2DMn1YnyFjGhNMvm5DneDllpnoEfdWpj5FzepYLAhUmn/WQnmRnri7rmhE96+aywxPtv+\n",

"CIRRxBPp0didU4/K1g68sacQ/16dhC/vn4Xwf+zqcWy8vxif3TMDAW49u9W1eiN2XqrDJ5llTJMF\n",

"j8PC6imBWJ8WgSifkanf5Jve8LU2GhYIw4e/xBlXT/LHbxfr8NmxcvxvlBvlEwYGi8WCp1CAlGhv\n",

"pER793msSqNHQb2CqXHNqZWjoMG+Bq2iRhWKGlX45Xxtn8cFezhbNGjR0VdH2cA58Tj0+Vz5iPQR\n",

"YmaYB4qblNib24gqqbUQb1Co0aBQY39+IxL8xZgbSW6SxwpEkBIIQ4wTj4NXb0jGHVtO4cuTlVg1\n",

"JQC/X6qzeWxpswrfnanGwxbd+CqNHt+drsJnx8qZGlShgIs1s0Nw7/zwETdDF3CJIB0t3L8gHL9d\n",

"rMPOS3V4ekXciD83CCOLUMDFjDCPK2ZNtHojipuUyLWIuObUKex6TVdLO1Et7cTunIY+j/MSCmhL\n",

"rEAxrpkUgHh/MQA68tus0qBa2omatg5USzvoc7Z1oLqtA3Uytc2IqCWufA6CPVwQ5O6CxAAxpoa4\n",

"9Xv9hJGHCFICYRiYF+mFW2YE4YezNbipm3n+wwsjcVWyP17fU4CjxS1470Axfjlfg0cWRaFa2oGv\n",

"TlZCYWqA8BYJcN/8cNwxOwQS59ExFck8YtRWtyxheJkU5IZZ4R44XS7FFycq8PQEM8onDAw+l43E\n",

"ALoJ6hYE93qc0UihUtrBGOKbBxHIO3X9vlaLSoMjRc04UtSMDw6Vwl/iBFcBFzVtHVDr+n4P4XPY\n",

"CHR3RpC7M4I9XBDs7oJgD2fTvy5wd+GRJqcxDBGkBMIwkR7vix/O1lhts7RK2n7fLOzOacDDX59H\n",

"TVsn/vFLNnNchJcrHkyNwPXTAkdF44ElfBIhHVWsWxCO0+VSfH2yEhsXRcF1nBqyE4YfNpuFcC9X\n",

"hHu54rrJAT32q3UGU3SzE2cqpNiT04CylvY+z2nO+gD09Dh/sROCbIjNYA9n+IqciKXZOIa8UxEI\n",

"Q0yrSoNXdxfgp3PWYvT3jfOtfDsv18ixs5dU/lXJ/lg1ZfSJUcCihpRESEcFS+J9EebpgorWDvx8\n",

"vgZ3E6N8goPQG4yol6vpdHqbRUpd2oHqtk4098MRwNOVbxKcPaOcAW7OzA0uYeJBBCmBMEQYjRR+\n",

"OFuNV3cX2ExpPf97Ln7aMA+Zxc3YfKQUJ8u6OuaXxPlgaYIv/syux9HiFrx/qAQ7LtbiX9ckYGmC\n",

"76hKS5EI6eiCw2bhvgXh+Ndvufj8WDnWzA4dtT6UhNEFRVFoVmq6xGY34Vkvv3Idp1DA7TWlHuTu\n",

"TCL2hF4hzwwCYQjIr1fg2V+zcb5KZrWdzQJeu3ESntuRgwtVMkT+X1enPZfNwqopgXgwNYIZDXrr\n",

"zGDsyWnAv//IQ01bJx788hwWxXrj+WsTEeY1OsZ08k1RWyJIRw83TQ/CW/uKUNHagQP5jViW6DfS\n",

"SyKMEuQdOouopnWUs6at0+Z4T0v4HDaC3J17jXK6kTpOwgAhgpRAcCDtGj3e2V+Ez7MqYDBScOVz\n",

"sDDOB7uy60FRwMZFUVCp9T3e9NctCMd9C8J72D2xWCysTPZHWqw33j9Ygi1Hy3CosBlZJZnYkBaB\n",

"hxZGwZk/sml8krIffbjwubhjdgg+OlyKT4+VE0E6gejUmuo4e4lyXmlCFJtFW4j1iHKa/u8jEpA6\n",

"TsKQQAQpgeAAKIrC3twGvLgzjynSX5nkh4cXRmHd9jPMFKUvTlT2SN/PCHXHs1fH9xlVcOFz8dSK\n",

"ONw4PQgv/J5Ld+MfLMHP52vx/LUjm8YnKfvRyT1zw7Alkx6ecLlGhklBbiO9JIIDMNdxVkltRTk7\n",

"0aK6ch2nl5CPIHOzUDfh6S8hdZyEkYEIUgJhkFRLO/Cv33JwqLAZAG0Q/dKqJCyI8sKC1w+iUdH1\n",

"ASHv1CHcyxUPpERgUpAE13+YhbOVbfjjcj2utdG12p1IbyG23zcLe3Mb8NLOPNTK6DT+wlhvvDBC\n",

"aXziQzo68ZM44drJAfj1Qi0+O1aOd2+bOtJLIvQDR9RxigTcbil107+mOk4XPvnoJ4w+yLOSQBgg\n",

"Wr0RW46W4b0DxdDojeBxWNiQFolHFkWhuFGF6Gd3Wx0/OdgND6VFYGmCH9Nk8siiKLyzvxgv7sxF\n",

"SrQX3Fz4V7wui8XCiiR/pMZ444NDJfgkswyHC5uxrCQT69Mi8PAwp/GJD+no5f4F4fj1Qi3+vFyP\n",

"p1fE2ZwARhh+Bl3HyaXrOHtYI5m+lziTOk7C2IMIUgJhAJwobcU/d2SjtJn22Jsb4Yl/r05CnawT\n",

"9207g+OlrVbHf/fgHMwO9+jxIfHQwkj8cbkeJU0qvPJnPv578+R+r8GFz8Xfl8fhxmlBeN6Uxt90\n",

"sAS/nK/Fv65NwLJhSuOT0aGjl6RACWaHe+CUySj/HyvjR3pJEwJH1XF29+E0/99bSOo4CeMPIkgJ\n",

"BDtoUWnwnz/z8csFeq6zl5CPZ1bGg8tm4dFvLyC/XmF1fHq8Lz69Z0av5xNwOXj9xmTc9PEJ/Hiu\n",

"BqunBmJ+lJdda4qwSOP/+4981Mo6sX4Y0/jmCOmVojqEkWFdSgROlUvxzakqPLY4mtjuOACdwYh6\n",

"mbqXKKd9dZwhHj2jnP5uTuBxSB0nYWJB3pkIhH5gNFL49kwVXt9dAIVaDxYLuGFqEEI8XPC/jCLU\n",

"yjp7PCY1xhub75p+xXNPD/XAXXNCsf1EJf7v12zseTzV7pR79zT+lszyYUvjk6am0c2SOB/GKP/H\n",

"s9VYOz98pJc06jEazXPVbUc56+WduEIZJ6njJBDshLwiCIQrkFMrxz935OBitQwAECBxQrSvCAcK\n",

"GiHroDvmPV35uHtuGA4VNuFitQzBHs5477Yp/TYk//vyWOzLbURlawfeOVA04NSqZRr/hZ15yCxq\n",

"HvI0PrF9Gt2w2SzcvyAcz/2Wi8+zKnDX3LAJb5RPURTknbpuk4a6opw1bZ1XvMEidZwEgmMhgpRA\n",

"6IXCBiXeO1jMeIiaafn/9u48Luo6/wP4axhguA+5hkNuUHFQ1DRFEc8E7w63tsM0zWrbrKx2u1Nr\n",

"O/ZXlp26Hdbm5nZorlpYiIqgJt4KiIKAnMMp9z3z/f0xHIOAXHMA83o+Hj6y+c4MH/yCvvi8P5/3\n",

"p6oBeeWqHfVeDhZ4OMwXd03wwKeH0nAuuwwSYyNsuX9CjzYotbA2M8HrS2V4+N+n8EVcBhaNcYPM\n",

"3bbPY/d1ssI3Kyfit6QCvL4vubWMHx7ohPWLR8NHg2X8thlShcbekzTrzgkeePf3K8gqrUF0cgEi\n",

"ZEO/L2ltg6ItbDYfbdny35zSGlTWcx0n0UDCQEp0gxR5BT6KScMvF/M7vd6gUCLY3RaPhvshQqba\n",

"MR+dXIAPD6YBAN6+Mxij3XofJucGuWDBGFf8ciEfz++6gN1/mQrjfqwjU5XxpQhX240fe6UI894/\n",

"gjXTffH4TM2U8VmyH/gsTI1x362e+PTwVXwVnzEkAmmjQom8stoO56mrdqrXoLiqodv3cLSSqIVM\n",

"ruMk0icGUqJml/Ir8GFMKqIS5V0+Z3qgEx4N98UUX4fWclx6URXWfX8OALAi1Bu3j/Po8xjWLxqN\n",

"+NRiJOZW4KujGVgz3a/P79XC3FSMZ+eNwJ0TVLvxj1wpwseH0vDz2Vy8sjAI80b3r4wvYdunQeHB\n",

"UG98HpeOhMxSnM8uw9jhdvoe0k0plQIKW/txdmyN1KN1nGbGHcNm8+897C30fsoZEbVhICWDl5yn\n",

"CqL7kzoPomIjERaNccWa6X4IcrNpd62qvgmPfHsalfVNmOQ9DC8t6F9bHSdrCV6aPwp/23kBm6Kv\n",

"YN5oKbwcNFNe93G07FDGf3T7aUwPdMKGfpTx2fZpcHCxMcOiMW7Y1dwo/8M/67dRviAIKGvtx9l+\n",

"ljOntAY5Zd2v45S0rOO84Tz1lv+3tTDR0WdDRP3FQEoGKymvHB/GpOK3pIJOr5ubiHH3xOFYHeYD\n",

"D3uLDtcFQcDffjqP1MIqOFtL8PF94zRS4lt2iwd2n8vFsaslePHni9i+6laNbY7orIx/pLmM//B0\n",

"Hzw+07/Xu39Zsh88Hprmg11nc/HLxXw8H6n9Rvk1DU3IaVm7qVZSzyqtQe712m7XcYqNRHC1Nety\n",

"ltOR6ziJhgwGUjI4ibnl2ByTiujkzoPoMEtTrAj1xgOTvWBv2fXGpH8dScevF+UwEYvw2f0T4Gxt\n",

"ppHxiUQivHl7MOZ9cARH00qw80wu7prQ92UAnemsjP/JoavYfTYPrywchXmjpT0OwexDOnjI3G0x\n",

"xdcBx9NL8M2xTLwwv38z+ppYx+lkLelwnnpL8HS1NevXOmoiGjwYSMlgXMxRBdEDlzoPosOHmWNN\n",

"mC/umjC827VlR9OK8c7+FADAq4tGY4KXvUbH6u1oiafmBOKd/Sl4fV8ywgOd4GQt0ejHALoq45/B\n",

"9EAnrF8UBF8nq27fg22fBpfVYT44nl6C7xKy8MTsAFjdpFG+JtZx2pgZtw+bar/3sLeAmQnXcRIR\n",

"AykZgAs5Zdh8IBUxKYWdXpe52+CR6X6IlEl7NBuTc70Gf/3uDJQCcNcED9x/q6emhwxAFRz2ns9D\n",

"cn4FNu5LxkdaWvPXVRk/4oO4HpXxWbIfXGaOcIavoyXSi6vxw8ls3D7OvV/rOM1MjOBhb9FhltOj\n",

"eZbT1pzrOImoewykNGSdzy7D5phUHOwiiIYFOOLRcD+E+jn0uDxd16jAY9vP4HpNI2TuNnhjqUxr\n",

"za9NxEZ4584xWPJJPPaez8Pt49wwa6SLVj4W0L6Mv35PEmKby/g/NzfV76qMz0A6sNU0NHU4aSi9\n",

"uBoAsHFfMjbuS77p68VGIrjZNa/jVJvl9Gj+vZOVhA3giajfGEhpyDmbdR2bY1Jx+HJRh2tGImDh\n",

"GDesme7b68bzgiDgld2JuJhbDnsLE2y5f4LWy43BHrZYNc0Hn8dl4OWfE/H7Ooebllg1wcfREl+v\n",

"nIjfkwuwcW9bGT8swBEbFo/uUMZn2yf9amhqXsfZxSxnSXX36zidrSXtj7e0t4BH81pOruMkIl1g\n",

"IKUh40zWdWw+kIrYKx2DqJmJEe6+ZThWh/li+LCOO+Z74ruELPx4OgdGIuDDP4/rdOe9Njw9NxD7\n",

"k+TILq3Fu79dxvrFo7X+MUUiEeaNlmJ6gBM+PZyGrbHpiEstxrwPjuDhMF/8dVZbGd9UrArlnCHV\n",

"rsLKOsRdKW5/xGVpDeQVdd2u47Q1N7mhJZI5vj+VjcTcCsjcbbDviTDdfBJERF1gIKVB7/S1Unxw\n",

"IBVxqcUdrtlbmGD5FG88GOqNYTfZMd+dM1nXsX5PEgDguXkjERbg1Of36i0LU2O8eXswHvgyAd8c\n",

"z8TiEDeM99TsJqqumJuK8cxtI3DHeA9s2JuEw5eL8Onhq9jd3FQ/QiZlyV5Hlm05jmslNZ1eMzMx\n",

"ahc21Uvqw4dZwMas4zrOeaOlmPrOQSTmVuBs1nWM09HXFBFRZxhIadA6lVmKzTGdB1EPe3M8HOaL\n",

"Zbd49Lqv5o0KK+vw2PbTaFQIiJRJ8Wi4b7/ery/CApxwx3h37DqTi+d3XsC+J8Jag6Au+DhaYtuK\n",

"iYhOLsCG5jL+Y/9RlfGfmhMAAGhSClAqBfaF1JIlY93weVwGahsVrY8ZiYBImSvum+yJW30cIO7F\n",

"n72zjRkWj3XHzjM5+DI+Ax/fy0BKRPojEgShm2JPm7Vr12LPnj24du0azp49i5CQENTV1eGee+5B\n",

"cnIyzM3N4ezsjM8++wz+/v4AgMLCQixfvhxXr16FRCLBp59+iunTp/dqkOvWrcOmTZt695nRkJWQ\n",

"UYrNMVdwNK2kw7UgVxs8Eu6LBcGuGln31qhQ4r7PTyAhsxT+zlbY/fhUra/h7Mr16gbM2RSLkuoG\n",

"rJsbiLWzA/QyjtoGBT47nIYtsekd1o2mvB7BNj5aVNugQOyVQkQlyhFzqRBVao3lHa1MMTdIikiZ\n",

"FFP8HHp0SENyXgXmfxgHsZEIsc/N0NkyFCKiG/XqX+y77roL8fHx8PLyavf4mjVrcPnyZZw/fx5L\n",

"lizB6tWrW689//zzmDx5MlJTU7Ft2zbce++9aGxs1MzoyaCcSC/Bn//1B/609XiHMDrV3wHfrpqE\n",

"X9ZOw5IQd41twnjz10tIyCyFlcQYWx+YoLcwCgD2lqZ4dVEQAODjg2lIK6zSyzjMTcVYd9sI/P70\n",

"dMwY0X7pwv/O5aIXP+NSL5mbihEhc8Xme8bh1Mtz8OWDt+CuCR6wNTdBcVUDdiRkYflXCbjljQN4\n",

"5ofzOJBcgDq1GdUbBbnZYKq/AxRKAd8cy9TdJ0JEdINezZC28Pb2xu7duxESEtLh2qlTp3DXXXch\n",

"MzMTAGBlZYW0tDRIpVIAwKRJk/Dmm29izpw5Pf54nCE1bMevluD9A1eQkFHa4drCMa54ZLofgj16\n",

"t2O+J3afzcVT358DAGx9YALmjZZq/GP0liAIWPn1SRy+XISJ3vb4fs0UvZbIBUFAdHIB1nx7uvWx\n",

"sABHrF88Gn49aKpPmtGoUOKP9BL8elGO6GR5uxOSrCTGmDXSGZEyKWaMcO5w6MPBlAI89PUpWEuM\n",

"ceyFWbDuZL0pEZG2aXy6Z/PmzViyZAkAoKSkBI2Nja1hFFCF2aysrC5fX19fj/r6+naPKRRd/4RP\n",

"Q5MgCDieXoJ/7r+Mc9llHa4/MNkLq8N84OVgqZWPn5xXged3XQAA/HWm/4AIo4Bq9/sbS2W47f0j\n",

"OJl5Hd8lZOH+yV7dv1CL47nthj+buNRiRHxwBKvDfPHErJs31SfNMBEbISzACWEBTnhjqQwnM0ux\n",

"P1GO/YlyyCvqsOd8Hvacz4OZiRFmjnBGhEyKWSOdYW1mghmBzvB1skR6UTV+OJWDVdN89P3pEJEB\n",

"0ui/FG+++SbS0tIQExPT5/d46623sGHDhnaPTZ48ub9Do0FCEAQcv1qCjfuSkSKv7HB97Sx/PBjq\n",

"DQcrzR+j2aKspgGPbD+FukYlpgc64em5gVr7WH3hYW+B5+aNwIa9yXgnKgVzRrlAamum1zFZS4xR\n",

"Wd+Er1dOxDfHMnHochE+U9uNHynrvKk+aZ7YSITJvg6Y7OuAVxcG4VxOGaIu5iMqUY6c67WISpQj\n",

"KlEOU7ERwgIcESGT4s7xHvi/3y5j29EMPDjFi31HiUjnNPa3zrvvvotdu3YhKioKFhaqhfEODg4w\n",

"NjaGXC5vfV5mZiY8Pbs+avGFF15AeXl5u1+TJk3S1DBpgBIEAfGpxQj75yHc+8WJdmHUSAS8ujAI\n",

"SRvmYd1tI7QaRhVKAU/+9xyyS2sxfJg5PrwnpFc7l3Vl+RRvhAy3Q2V9E175X6Le12227Ph3tTXH\n",

"Vysm4vPlt8DD3hz55XX4y3/O4IEvE/S25tWQGRmJMN7THi8tCELc32Zi3xPT8PhMP/g6WqJBoURM\n",

"SiGe++kC/u+3ywCAnOu12JHQdQWLiEhbNBJIN23ahB07diA6Ohp2dnbtri1btgxbtmwBAJw8eRK5\n",

"ubkIDw/v8r0kEglsbGza/RKLuWt3qBIEAXGpRRiz4Xfc/+UJ5Fyvbb1mb2GCD+4OweU3IvHQNB9Y\n",

"6mBD0eYDVxB7pQgSYyNsuX8C7Cz63rtUm8RGIrx9ZzCMjUSITi7A/kR59y/SIvVepCKRCHODXHBg\n",

"XTjWzg6AqbER4tOKEbn5CN6OSkG12s5w0h2RSASZuy2emzcSMc+E47enpuOpOQEYKbVu97xX/peE\n",

"u7cexzfHMiEvr9PTaInI0PRqU9MjjzyCX375BXK5HA4ODrC2tsbhw4cxfPhw+Pr6wtpa9RebRCLB\n",

"iRMnAAAFBQV44IEHkJGRAVNTU3z88ceYOXNmrwbJTU1DjyAIOJJajAe/SuhwzdfJEq8uDEJ4oJNO\n",

"y7zpRVWY9V4sANWsrKutOdzszOBuZw43O3O425vD3a75l735gFgb+d7vl/HRwTQ4WUtwYF04bM31\n",

"syFl+j8PIau0Bjsfm4IJXsPaXbtWUo31e5JwqPkoV1dbM7y8IAjzg1nGHyjSi6rw7+PX8HUnO+3H\n",

"e9ohUuaKCJm0z6ecERF1p0+77HWNgXToEAQBhy8XYeXXJztcu8XLHq8sDMLY4Xa6HxiA8ppGLN+W\n",

"gOS8cjQquv+2sLMwaQurdubwsG/7vZudORytTLUeuOoaFZj/YRzSi6rx50nD8dYdY7T68boyZ1Ms\n",

"0gqr8N3DtyLUz7HDdUEQcOBSITbsTWqdBZ/mr9qN7+/M3fgDxbM/nsdPp3MAABO87HH62vV214Pd\n",

"bREhU/U69WUXBSLSIAZS0glBEPBbUgEe3X66w7W5QS54af4oeDtqZ8d8bymVAoqq6pFbVovc67XI\n",

"LatFntrvc8tqUVnXfdnZ1NiobUZVbZbVzc4MHnYWkNqaaeS0pYSMUvxp63EAwI6HJ2OKn0O/37O3\n",

"5m+OQ3J+Bb5eOREzRjh3+by6RgU+PXwVW2KvoqFJCROxCKumqXbj62JJBt3cpfwKRG6Og5EIiH1u\n",

"JkzERvgtSY6oxHwkZJRCqfavxQgXa0TIpJgf7IpAFyvOdhNRvzCQklYJgoA95/Pw5H/Pdbh29y3D\n",

"8ey8EXCy1t4mJW2pqGtEnlpQzSmrRV5ZHXKv1yCvrA4FlXXo7jtLJAKcrSWts6rqSwJawmtnZ5B3\n",

"5sWfL+K7E1nwcbRE1JNhOj8taeknR3Euuwz/emBChzZQnblWUo0Ne5NxMKUQAMv4A8n9X5xAfFox\n",

"Vk/zwcsLg1ofL66qR3RyAaIS5TiWVowmtXTq62jZPHPqCpm7De8hEfUaAylphSAI+C4hCy/9nNjh\n",

"2mMz/PD4TH+9nnqkbQ1NShRU1CHnenNobQ6ueeVtM631Tcpu38daYtw8q9oWWt3UZl2drSUwMhKh\n",

"oq4Rc96LRWFlPR6f6Yfn5o3UwWfZ5k9bjyMhoxQf3zsOC8e49fh1B5ILsF6tjD/V3wEbFstYxtej\n",

"Q5cLsXLbSVhJjHG8i0b55TWNiL5UgP2J+TiSWowGta9lD3tzRMqkiJC5YtxwO70e3EBEgwcDKWmU\n",

"IAjYEpuOd/andLj20vxRWDHVu0dnbA91giCgpLqhw1IA9dB6vab7I3ZNxCJIbVUbr5JyK1DZvIP9\n",

"pfmjMHuUM9zszHUyW/rAlycQl1qMTX8aizvGe/TqtXWNCnx2+Co+UyvjPzTNB2tnBbCMrwdKpYDb\n",

"PjiCtMIqvLxgFFaH+d70+ZV1jTiYUoj9iXIcvlyEWrWjSqU2Zpg32gURMldM8hk2IFuoEdHAwEBK\n",

"GiEIAt6KSsG/jqR3uPbusrG4c7w7y3i9VNPQhLyy2uZZ1jrkltU0LwtQhVd5RR0Uyu6/fR2tTNtt\n",

"vrqxY4CdhUm/782qr08iJqUQb98RjHsmdd1n+GaulVRj495kxDSX8aU2Znh54SgsCHbl146O7UjI\n",

"wgu7LsLdzhyxz83ocaP82gYFYq8UIipRjphLhahSa/HlaGWKuUGqDVFT/Bz4gykRtcNASv22YW8S\n",

"th3N7PD4VytuwayRLrofkIFoUihRWNl+89XZrDIcuFTQq/exMBW3C6se9i3trizgZmcGqY1Zt4Hk\n",

"se2nEZUox8Ylo7F8inc/PitVGX/DviRkl6qX8UfD39m6m1eSptQ1KhD69kGUVjfgk3vHY8EY116/\n",

"R32TAvGpxYhKlCM6uQDltW0z/rbmJpgzygXzg6WYFuAIiTF7TRMZOtbDqF/OZZd1CKM7HwvFBC97\n",

"/QzIgBiLjeDWHCInerc9/t2JLLz480WYm4jx46NTAKB1HWvretbmmdbiqnrUNCiQVljV5UlKYiMR\n",

"pDZmHXqyutmZw6P5/9Ub4/fXnCAXTAtwxJbYq/j08FUcTStBxAdxWBXGMr6umJmIcf9kL3wYk4ov\n",

"4tP7FEglxmLMHuWC2aNc0KhQ4o/0Evx6UY7oZDmKqxqw80wOdp7JgZXEGLNGOiNSJsWMEc4wN2U4\n",

"JTJEnCGlfimtbsBzP55HTEohfn96OgJdOIulb0qlgHs+/wMJGaWYHuiEb1ZO7LLkXdeoQH65Kpzm\n",

"lbV0C2hby5pXVtujnqzqVoR6d9iA1deerFklNdi4LwkHLrGMr2tFlfWY+vZBNCiUGv0hU6EUcDKz\n",

"FPsT5difKIe8ou00KDMTI8wc4YwImRSzRjp3uqGKiIYmBlKiIehqURUiN8ehoUmJD+4OwdJx7n16\n",

"nxt7sqrPtLZ0EKjoZU9W9eUALWtZXW3Nb9qTNeaSajd+Sxk/1M8BG5ewjK9tf/vpPH44lYP5wVJ8\n",

"et8Ejb+/UingXE4Zoi7mIypR3u7oYFOxEcICHBEhk2JukMuAPcaXiDSDgZRoiPr4YCre/f0K7C1M\n",

"cGBdOBystNPvtbKuEY9uP42jaSWwNjPGfbd6tTtMoE89WVtmWG2bN2DZm8NUbIQtsVfx2eGrqG9S\n",

"wthIhFXTfPDE7IAh3UJMny7LKzHvgyOtjfK1eXSoIAhIyqtAVGI+oi7KkV5c3XrN2EiEKX4OiJS5\n",

"4rbRLnDU0tcyEekPAynRENXQpMTij+ORIq/E7ePc8f7dIVr7WG9FXcLW2HSsmuaDV9SaqbeM48ae\n",

"rOq9WXvbk1WhFJB6w3rXlxeMwsqpPmwrpAUtLb0emuqDVxcFdf8CDRAEAVcKqhCVmI/9iXKkyCtb\n",

"rxmJgInewzA/2BXzRkshtTXTyZiISLsYSImGsHPZZbj906MQBOCbhyYhPNBJKx9n0++X8eHBNDww\n",

"2QuvL5X16rVd9WRtC691KK1u6PH7TfYd1m7DVcuyAF31ZB1qYq8U4cGvEmBpKsbxF2f3+PQwTUov\n",

"qsL+JDmiLspxMbe83bXxnnaIlLkiQibV6gwuEWkX61xEQ1jIcDusCPXGtqOZeHHXRfz+9HSt7FJv\n",

"Wf/ZqOj9LnuRSARHKwkcrSQY42HX6XNaerK2dAdoCavpxdU4n13W7rl/pJd2+bEcrUzb92NVa3Wl\n",

"qZ6sQ830AEcEOFshtbAK3ydk4+HpN2+Urw2+Tlb4ywx//GWGP7JLa/BbkhxRiXKcvnYdZ7LKcCar\n",

"DP/49RKC3W2bjzCVwteJp30RDSYMpERD3LO3jcDvSQXILavFpugrHUrqmqDJtk+dsTA1hr+zdZeb\n",

"mDKKq/HX784gKa+i9TEbM2OM97JvnXWtaVCguKoBxVUNuJBT3un7tPRkbVvL2rLxquc9WYcakUi1\n",

"Vvf5XRex7WgGVk711uufwfBhFlgd5ovVYb6Ql9c1h9N8JGSU4mJuOS7mluP/fruMES7WiJBJMT/Y\n",

"FYEuVvxBg2iAYyAlGuIsJcZ443YZVm47iW1HM7B4rBvGDrfT6McwbQ4o9X2YIdUEH0dL/LI2DAdT\n",

"CrB+TzKySmtQUdeE+kYlPr1vPPydrVBe29ihW0Bve7IaiVStp9RbWrUsC2hZIjAU+6QuHeeO//vt\n",

"MvLK6xCVKMeisW76HhIAQGprhgdDvfFgqDeKq+oRnVyAqEQ5jqUV43JBJS4XVGJzTCp8HS2bZ05d\n",

"IXO3YTglGoC4hpTIQDz137PYfS4PI6XW2PvENI0e3djSjH9ukAs+X36Lxt63L+oaFdgam45PD6e1\n",

"7sZ/aJoP1nazG7+lJ+uNa1lberLml9WhoQeB287CpK07gHrHgH72ZNW396OvYHNMKsZ62GL341MH\n",

"9OdQXtOI6EsF2J+YjyOpxe1m7j3szREpkyJC5opxw+1gxI1wRAMCAymRgSipqsecTbG4XtOI5+aN\n",

"wOMz/TX23j+dzsGzP55HeKATvnloksbetz+yS2uwYW9y61GqLjYSvLQgCIvG9K2pvlIpoLiqvv3h\n",

"Ac2htS89WdudfKW2+aq7nqz6UlRZj6nvHERDkxI/PToFt3gP0/eQeqSqvgkHUwoRdTEfhy8XobZR\n",

"0XpNamOGeaNdECFzxSSfYezSQKRHDKREBmTXmRys++E8TI2NsP/JMI1t/NhzPg9rd5zFFF8H7Fgz\n",

"WSPvqSnqZXwAmOLrgA1LRmvlVLHKukbkldUht6ymdSlAX3qyOllJ2h3Pqt6T1c3OHLbm+jnB6O8/\n",

"XcD3p7IRKZPis/s13yhf22obFIi9UoioRDliLhWiqr7tBwhHK1PMDVJtiJri56DRCgIRdY+BlMiA\n",

"CIKA5V8lIC61GLf6DMOOhydrpGS5P1GOR7efxgQve+x8LFQDI9WsukYF/nUkHZ8caivjr5zqjSfn\n",

"BOq0qX6jQgl5eV0Xa1lVj/W0J6tb61IA1clXqhlW1e+drCVame27UlCJ295XNco//OxMeDoM3jZL\n",

"9U0KxKcWIypRjujkApTXNrZeszU3wdwgF0TKpJgW4AiJMduFEWkbAymRgckurcFt7x9BbaMCb98R\n",

"jHsmefb7PQ+lFGLl1ycR7G6LvU9M08AotSO7tAYb9yUjOrmtjP/i/FFYPNZtQKyJFAQBpdUN7Y5n\n",

"7UtPVhOxCFJbs9ZZVfWerC1LBPrak3X5Vwk4cqUIK6d647VFo/v0HgNNo0KJP9JLEJUox+9JchRX\n",

"tf0ZW0mMMWukMyJlUswY4QxzU4ZTIm1gICUyQF/EpeONXy7B2swYMevC4WzTv9NujqYV474vTmCE\n",

"izV+e3q6hkapPYdSCrF+bxKulajK+JN9h2HjEplWyviapurJ2sUs6/VayCvqoFB2/9e6g6Vpu0MD\n",

"1HuyutmZw76LnqxHrhRheXOj/GMvzNbb8gFtUSgFnMwsxf5EOfYnyiGvqGu9Zm4ixowRToiQSTFr\n",

"pDOs9XBIANFQxUBKZICaFErc8dkxXMgpx/xgKT69r3/rAU9mlmLZluPwcbTEoWdnaGaQWlbXqMDn\n",

"R9LxsZ7L+JqmUAooqKjrsOFKfS1rdYOi2/cxNxGrlgPYW7Tryepqa45VX59EdYMCL84fiTXT/XTw\n",

"WemHUingXE4Zoi7mIypRjpzrta3XTMVGCAtwRGSwK+aOcoGtBcMpUX8wkBIZqOS8Ciz6OB4KpYCt\n",

"D0zAvNHSPr/X+ewyLPnkKNztzHH0+VkaHKX2ZZfW4PV9yfi9uYzvbC3BSwsGThlf0wRBQEVtE3LK\n",

"alQzrddrWpcDtHQQKKqs7/H7hQy3g5eDRbuerC3troZST1ZBEJCUV4GoRFU4TS+qbr1mbCTCFD8H\n",

"RMpccdtoFzhaSfQ4UqLBiYGUyIC9sz8Fnx2+ChcbCaLXhff5nPJL+RWI3BwHRysJTr08R8Oj1I1D\n",

"lwuxfk9bGf9Wn2F4fengKONrWl2jot3mq9yy9mtZW/6MumNrbtKupZV7u7WsZnCykgzK0C8IAlIL\n",

"q/DrxXzsT5QjRV7Zes1IBEzyGYZImSvmjZZCatu/5TBEhoKBlMiA1TUqEPHBEWSW1OD+yZ54Y2lw\n",

"n97nalEVZr8XCxszY1xYP0/Do9SdljL+J4fTUNeohNhIhJWh3nhyTgDXC6pRKgW88r9E/OdEFgDg\n",

"hciRamtZVbOu/erJ2hxapbZmg2KHe3pRFfYnyRF1UY6Lue2PpR3vaYdImSsiZFIMHzZ4uxIQaRsD\n",

"KZGBO3a1GPd+fgIA8OOjUzCxDw3Ps0trEPbPQzAzMULK65GaHqLOGVoZvy9Kquox5W1Vo/zOvm46\n",

"68mqvpa1oKIO3e296qwn641Htg60TVXZpTX4LUmOqEQ5Tl+73u5asLtt8xGmUo31ACYaKhhIiai1\n",

"4bmfkyV+fTKs17NShRV1mPRmDIxEQPpbC7Q0St07dLkQG/YkIVOtjL9xiQwjpIZXxu/MC7suYEdC\n",

"NuaNdsHWB3p3ZGx3PVnzympR19i3nqxudmat3QKcrc30dgKTvLyuOZzmIyGjtF0AHym1bg6nrgh0\n",

"seIPOmTwGEiJCOU1jZi9KRbFVfVYOzsA6+YG9ur1ZTUNCNkYDQBI+0ckjIfQKTd1jQp8Eafajd9S\n",

"xl8R6o2nWMZHakEl5r5/BCIRcPjZGfBysNTYe3fWk7VlxrWl7VVPerIaG4ngatfWk7XDWlZbc530\n",

"Fi2uqkd0cgGiEuU4llaMJrV06uto2RpOZe42DKdkkBhIiQgA8MuFfDz+3RmYiEXY90RYr2YBaxqa\n",

"EPTqbwCA5I3zYGE6dHZXt8i5rirj/5akKuM7WUvw0vxRWBJi2GX8FdsScPhyEVaEemP9Yt02ylfv\n",

"yZqnNtPa0i1AXl7XLvh1paUnq/rxrOprWbvqydpX5TWNiL5UgP2J+TiSWowGtdO5POzNESmTIkLm\n",

"inHD7TRykhrRYMBASkQAVDNSD//7NA5cKsA4Tzv89Ghoj0udTQol/F+KAgCce3Uu7CxMtTlUvTrc\n",

"vBu/pYw/yWcYXjfgMn58ajHu//IELEzFOP787AHVj/PGnqwdlgf0qSfrDRuw7M3hYmMGkz5WBarq\n",

"m3AwpRD7E/NxKKUItY1t45HamCFCJkWETIqJ3sP0tvSASBcYSImoVX55LeZuOoKq+iZsWDwaD4Z6\n",

"9/i1vi/8AqUAJLw4u98nPw109U1tTfUNvYwvCAIiN8chRV6J5yNH4tHwwdMov7OerHnlqg1YvenJ\n",

"aiRShccbj2dVb3nVk56stQ0KxF4pRFSiHDGXClFV39apwNHKFHODVBuipvg59DkAEw1UDKRE1M63\n",

"xzPxyv+SYGkqxu/rwuFuZ96j1418JQp1jUrE/W2mwbS3YRlf5cdT2XjupwuQ2pgh7u8zh1RYateT\n",

"tZMNWPlldWhQdL/5qqUna9vxrG0bsNztzeFoKWlXnq9vUiA+tRhRiXJEJxegvLax3XvNDXJBpEyK\n",

"aQGOg6I1FlF3GEiJqB2lUsCyrcdx+tp1zBzhhK9WTOxRuBqz/jdU1DUh5plw+BlYSxtDL+PXNykw\n",

"9e1DKK6qx+Z7QrAkxF3fQ9IZpVJAcVV9+8MDrjf3Yy2r7VVPVjdbsw5rWT3szOFsY4as0mocuFSI\n",

"35PkKK5q28xlJTHGrJHOmB8sRXigs042aBFpAwMpEXWQWlCJBR/Go0GhxId/HofFY926fc0tbxxA\n",

"cVU9op4MwyhXGx2McmCpb1Lgi7gMfHQw1SDL+B/GpGJT9BXI3G2w96/TDGqGuDstPVnVN1y1nIDV\n",

"256sUlsz5JXVobiq41ICcxMxZoxwQoRMilkjnQ3i646GDgZSIurU5gOpeP/AFThYmuLAunDYW958\n",

"o9LUtw8it6wW/3t8KsYOt9PNIAegnOs1eGPfJexPkgMwnDJ+SVU9Qt8+iPomJb5fMxm3+jroe0iD\n",

"hnpPVvWw2tuerOpMxUYIC3DE4hA3HuhAg8LQ681CRBrx2Aw/7LuQh9TCKvzj10t4d9nYmz7f1Fi1\n",

"brAn6+mGMg97C2x5YAJirxRh/Z4kZBRX46nvz+G7hCxsXDIaI6VDc/bYwUqCO8Z7YEdCFr6Iz2Ag\n",

"7QUTsRGGD7Pocu11S0/WG0++ullP1gaFEjEphYhJKYTYSISFY7qvchDpEwMpEXXK1NgIb985Bndt\n",

"OYafTudgaYg7pgU4dv385o0s6j0VDVl4oBP2PxXWWsZPyCjFgg/j8eAUbzw1NwA2Q7CcumqaN3Yk\n",

"ZOHApQJkFlfD21FzjfINmUgkgoOVBA5WEgR72Hb6nNoGRdsMq9pMa4NC2afjgIl0behshSQijZvg\n",

"ZY/lk70AAC/+fBG1N+nZ2DpDykDaSmIsxuMz/RHzzAxEyqRQKAV8dTQDs9+Lxc9nczAIVkz1ir+z\n",

"NWaOcIIgANuOZuh7OAbF3FQMf2crTA90wp8neeKZ20Zg090h+Pje8XAZ4m3YaGhgICWim3ouYiRc\n",

"bc2QVVqDDw5c6fJ5LYG0noG0A3c7c3x2/wT8+6FJ8HW0RFFlPZ7+/jzu3voHUuQV+h6eRq0O8wUA\n",

"/HAqB+U1jd08m4hIhYGUiG7KSmKMN5bKAACfx6UjMbe80+e1luwNfA3pzUwPdELUU2F4bt4ImJuI\n",

"kZCpKuNv3JuMirqhEd5C/RwwUmqN2kYFvkvI0vdwiGiQYCAlom7NHuWChWNcoRSAv++8gKZOQidL\n",

"9j3TUsY/8Ex4uzL+rHeHRhlfJBK1zpJ+fSyDXw9E1CMMpETUI68tGg1bcxMk5VXgy/iO6wMZSHvn\n",

"xjJ+cVVbGf9S/uAu4y8a6wonawkKKurx68V8fQ+HiAYBBlIi6hEnawleWjAKALAp+gqulVS3u94W\n",

"SLve+EQdtZTx/xbRVsZf+FE8NuxNGrRlfImxGA9OUW2G+yI+fdDP+hKR9jGQElGPLZvggVA/B9Q3\n",

"KfHizxfbBQ0J15D2mcRYjL/MUJXx5weryvjbjmZi1rux2HVmcJbx773VC2YmRkjMrcCJjFJ9D4eI\n",

"BjgGUiLqMZFIhDdvD4bE2AhH00rw0+mc1mss2fefu505Pr1vAr5d1VbGX/fDefxp6/FBV8YfZmmK\n",

"O8d7AAC+iGMLKCK6OQZSIuoVb0dLPD03EADwxi+XUFSpOlObgVRzwgLal/FPZl7Hwo/isX7P4Crj\n",

"PzTNBwAQk1KA9KIqPY+GiAYyBlIi6rXV03ww2s0G5bWN2LgvGUBb26d6luw1oqWMH6NWxv/6mKqM\n",

"v/P04Cjj+zlZYfZI5+ZG+Zn6Hg4RDWAMpETUa8ZiI7x9xxgYiYC95/MQc6mAM6Ra4qZexndSlfGf\n",

"+VFVxk/OG/hl/FVhqlnSH09no6ymoZtnE5GhYiAloj4J9rBt7Tf58u7E1iDKQKodYQFO2P/kdPw9\n",

"YqRaGT8O6/ckobx24Jbxp/g6IMjVBnWNSvznBBvlE1HnGEiJqM+enhMIz2EWyC+vw39PZgNgINUm\n",

"U2MjPDbDDzHPhGNBsOqggq+PZWL2e4cHbBlf1ShfNUv6zbFMfn0QUacYSImoz8xNxfjH7apjRavq\n",

"mwCw7ZMuuNmZ45P7xmP7qluby/gNeObH81i2ZWCW8ReOcYOztQSFlfXYdyFP38MhogGIgZSI+iUs\n",

"wKm1vQ/AGVJdmhbgiP1PTsfzkSNhYSrGqWsDs4xvamyEB0O9AahaQA3EmVwi0q9eBdK1a9fC29sb\n",

"IpEI586d6/ZxAEhNTUVoaCgCAwMxceJEJCUlaWLcRDSAvLxgFBwsTQEwkOqaqbERHg1vLuOPaV/G\n",

"/+l0DpTKgRH+7rvVE+YmYiTnV+B4eom+h0NEA0yvAuldd92F+Ph4eHl59ehxAHjkkUewZs0aXLly\n",

"BX//+9+xYsWKfg2YiAYee0tTvL5UBrGRCH7OVvoejkFytTXHJ/eqyvh+zWX8ZwfQbnw7C1PcOcEd\n",

"APAlG+UT0Q1EQh9qJ97e3ti9ezdCQkJu+nhhYSH8/f1RWloKY2NjCIIAV1dXxMfHw9/fv9P3rq+v\n",

"R319fbvHXnnlFWzevLm3wyQiHSupqscwS1OIRCJ9D8WgNTQp8dXRDHwYk4qaBgWMRMDyKd54em4g\n",

"bM1N9Dau9KIqzHovFgAQ80w4/Jz4wwsRqWh1DWl2djZcXV1hbGwMQLXb0tPTE1lZXbf+eOutt2Br\n",

"a9vuV0JCgjaHSUQa4mAlYRgdAAZqGd/XyQpzRjkDALYd5SwpEbUZcJuaXnjhBZSXl7f7NWnSJH0P\n",

"i4ho0Gkp4/9ndfsy/rKtx5GUV66XMa2apupd+9PpHFyvZqN8IlLRaiAdPnw48vPz0dSkagcjCAKy\n",

"srLg6enZ5WskEglsbGza/RKLxdocJhHRkDbV3xFRarvxT1+7jkUfxeO1/yXqfDf+ZN9hGO2mapT/\n",

"XQIb5RORilYDqbOzM8aPH4/t27cDAHbu3AkPD48u148SEZF2dFbG/+b4Ncx69zB+PJWtszK+eqP8\n",

"r49lor5JoZOPS0QDW68C6SOPPAIPDw/k5ORg3rx5rcGyq8cBYOvWrdi6dSsCAwPx9ttvY9u2bZr9\n",

"DIiIqMduLOOXVDfguZ8u4K4tx5CYq5sy/oJgN7jYSFBUWY995/N18jGJaGDr0y57XVu3bh02bdqk\n",

"72EQEQ0pDU1KbDuagc1qu/Hvn+yFZ+aOgK2Fdnfjf3o4Df/cfxmjXG3w69pp3AxHZOAG3KYmIiLS\n",

"DVNjIzzSXMZf2FzG//fxa5j13mH8oOUy/r2TVI3yL+VX4PhVNsonMnQMpEREBs7V1hwfN5fx/Z2t\n",

"UFLdgL9puYxvZ2GKZbeojpz9Ip4toIgMHQMpEREBUO3G/3VtGF5o3o1/JqsMiz+Ox6v/S0R5jeZ3\n",

"46+c6gORCDiYUoi0wiqNvz8RDR4MpERE1EqXZXwfR0vMGeUCAPiKjfKJDBoDKRERddBSxv/uhjL+\n",

"nRou46+epmoBtfN0DkrZKJ/IYDGQEhFRl0Kby/gvzleV8c82l/Ff2a2ZMv4kn2EIdrdFfZMS//nj\n",

"mgZGTESDEQMpERHdlKmxEdZM98PBZ2Zg0Vg3KAXg2z+uYeZ7h/HDyf6V8dUb5X9z/Bob5RMZKAZS\n",

"IiLqEamtGT768zh897CqjF9a3YC/7ex/GX9+sCukNmYorqrHnnN5GhwxEQ0WDKRERNQroX6OiHoy\n",

"DC/NHwXL5jL+on6U8U3ERlgx1RsA8GV8BgbBeS1EpGEMpERE1GsmYiM8PN0XMc/MwOKxbhD6Wcb/\n",

"80RPWJiKkSKvxNE0NsonMjQMpERE1GdSWzN82FzGD1Ar49/xWe/K+LYWJvjTLcMBAF/Ep2truEQ0\n",

"QDGQEhFRv4X6OeJXtTL+uWxVGf/l3RdRVtOzdk4rp3pDJAIOXy5CakGllkdMRAMJAykREWlESxn/\n",

"4LNtZfztf2Rh1nux+P5kVrdlfC8HS9wWxEb5RIaIgZSIiDTKxUZVxt/x8OTWMv7fd17EHZ8dw8Wc\n",

"m5fxV03zBQDsOpOLkqp6XQyXiAYABlIiItKKKX4O+PXJMLy8oK2Mv/iTeLz0c9dl/Ine9hjj0dwo\n",

"/0SWjkdMRPrCQEpERFpjIjbC6jBVGX9JiKqM/58TWZj57mH8N6FjGV8kEmFV83Gi/z6eibpGNson\n",

"MgQMpEREpHUuNmbYfI+qjB/oYoXrNY14flfnZfz5wa5wtTVDcVUD9pxno3wiQ8BASkREOjPFzwG/\n",

"rFWV8a0kxp2W8U3ERlgR6g0A+DKOjfKJDAEDKRER6VRLGT/mmfAuy/j3TFI1yr9cUIn4tGJ9D5mI\n",

"tIyBlIiI9KKljP/fNe3L+Ld/dgzXSqrbGuXHsQUU0VDHQEpERHo12bd9Gf98dhmWfHIUV4uqAACx\n",

"V4pwhY3yiYY0BlIiItK71t34z4RjaXMZPy61rVT/VTxnSYmGMgZSIiIaMJxtzPBBcxl/hIt16+O7\n",

"zrJRPtFQxkBKREQDzmRfB+xbOw2vLAyClcQYDU1KlFR33kyfiAY/Y30PgIiIqDMmYiOsmuaD28e5\n",

"o6CiDoFqM6ZENLQwkBIR0YA2zNIUwyxN9T0MItIiluyJiIiISK8YSImIiIhIrxhIiYiIiEivGEiJ\n",

"iIiISK8YSImIiIhIrxhIiYiIiEivGEiJiIiISK8YSImIiIhIrxhIiYiIiEivGEiJiIiISK8YSImI\n",

"iIhIr0SCIAj6HkR37rjjDnh7e+t7GKQBCoUCCQkJmDRpEsRisb6HQ1rEe204eK8NB++14ejLvfby\n",

"8sKTTz7Zp483KAIpDR0VFRWwtbVFeXk5bGxs9D0c0iLea8PBe204eK8Nh67vNUv2RERERKRXDKRE\n",

"REREpFcMpERERESkVwykpFMSiQSvvfYaJBKJvodCWsZ7bTh4rw0H77Xh0PW95qYmIiIiItIrzpAS\n",

"ERERkV4xkBIRERGRXjGQEhEREZFeMZBSv3l7e2PEiBEICQlBSEgIvv/+ewBAamoqQkNDERgYiIkT\n",

"JyIpKan1NX29Rrq1du1aeHt7QyQS4dy5c62Pa+Pe8r7rV1f3uqvvb4D3ejCqq6vD0qVLERgYiLFj\n",

"x2Lu3LlIS0sDABQWFiIiIgIBAQGQyWQ4cuRI6+u0cY2062b3esaMGfDx8Wn9vn7//fdbX6e3ey0Q\n",

"9ZOXl5dw9uzZDo/PnDlT2LZtmyAIgvDjjz8Kt9xyS7+vkW7FxsYK2dnZHe6xNu4t77t+dXWvu/r+\n",

"FgTe68GotrZW+OWXXwSlUikIgiB89NFHQnh4uCAIgrBy5UrhtddeEwRBEBISEgR3d3ehoaFBa9dI\n",

"u252r8PDw4Wff/6509fp614zkFK/dfYPVkFBgWBtbS00NjYKgiAISqVScHFxEVJTU/t8jfRH/R5r\n",

"497yvg8cPQ2kvNdDw8mTJwUvLy9BEATB0tJSyM/Pb702ceJEITo6WmvXSLfU7/XNAqm+7jVL9qQR\n",

"y5cvR3BwMFatWoWioiJkZ2fD1dUVxsbGAACRSARPT09kZWX1+RoNDNq4t7zvA9uN39+Adr4OSPc2\n",

"b96MJUuWoKSkBI2NjZBKpa3XvL29kZWVpZVrpHst97rF888/j+DgYNx9991IT08HAL3eawZS6rcj\n",

"R47gwoULOHPmDBwdHfHggw/qe0hEpCH8/h663nzzTaSlpeGtt97S91BIy268199++y1SUlJw4cIF\n",

"hIWFYeHChXoeIQMpaYCnpycAwMTEBE899RTi4uIwfPhw5Ofno6mpCQAgCAKysrLg6enZ52s0MGjj\n",

"3vK+D1ydfX8D2vk6IN159913sWvXLkRFRcHCwgIODg4wNjaGXC5vfU5mZiY8PT21co1058Z7Dai+\n",

"fwFVheKvf/0r0tPTUVJSotd7zUBK/VJdXY2ysrLW/9+xYwfGjRsHZ2dnjB8/Htu3bwcA7Ny5Ex4e\n",

"HvD39+/zNRoYtHFved8Hpq6+vwHtfB2QbmzatAk7duxAdHQ07OzsWh9ftmwZtmzZAgA4efIkcnNz\n",

"ER4errVrpH2d3eumpiYUFBS0Pmfnzp1wcXGBg4MDAD3e6x6vNiXqxNWrV4WQkBAhODhYkMlkwuLF\n",

"i4WMjAxBEAQhJSVFmDx5shAQECBMmDBBuHDhQuvr+nqNdGvNmjWCu7u7IBaLBWdnZ8HPz08QBO3c\n",

"W953/ersXt/s+1sQeK8Ho+zsbAGA4OvrK4wdO1YYO3asMGnSJEEQBEEulwtz584V/P39haCgIOHg\n",

"wYOtr9PGNdKuru51VVWVMGHCBEEmkwljxowRZs2aJZw7d671dfq61zzLnoiIiIj0iiV7IiIiItIr\n",

"BlIiIiIi0isGUiIiIiLSKwZSIiIiItIrBlIiIiIi0isGUiIiIiLSKwZSIiIiItIrBlIiIiIi0isG\n",

"UiIiIiLSKwZSIiIiItIrBlIiIiIi0qv/BzYWmS6p7Ji3AAAAAElFTkSuQmCC\n",

"\">\n",

" </div>\n",

" <script type=\"text/javascript\">\n",

" (() => {\n",

" const chartElement = document.getElementById(\"chart-399f2843-fd22-4188-a806-0fc30842e23a\");\n",

" async function getCodeForChartHandler(event) {\n",

" const chartCodeResponse = await google.colab.kernel.invokeFunction(\n",

" 'getCodeForChart', [\"chart-399f2843-fd22-4188-a806-0fc30842e23a\"], {});\n",

" const responseJson = chartCodeResponse.data['application/json'];\n",

" await google.colab.notebook.addCell(responseJson.code, 'code');\n",

" }\n",

" chartElement.onclick = getCodeForChartHandler;\n",

" })();\n",

" </script>\n",

" <style>\n",

" .colab-quickchart-chart-with-code {\n",

" display: block;\n",

" float: left;\n",

" border: 1px solid transparent;\n",

" }\n",

"\n",

" .colab-quickchart-chart-with-code:hover {\n",

" cursor: pointer;\n",

" border: 1px solid #aaa;\n",

" }\n",

" </style>"

]

},

"metadata": {}

}

]

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"import matplotlib.pyplot as plt\n",

"\n",

"# Generate sample data (heights and weights)\n",

"np.random.seed(0) # For reproducibility\n",

"heights = np.random.normal(loc=170, scale=10, size=1000) # Mean=170, Std=10\n",

"weights = np.random.normal(loc=70, scale=5, size=1000) # Mean=70, Std=5\n",

"\n",

"# Combine heights and weights into a single 2D array\n",

"data = np.column\_stack((heights, weights))\n",

"\n",

"# Define subsets based on indices or conditions\n",

"# For example, let's divide the data into two subsets based on height\n",

"subset1\_indices = heights < 170\n",

"subset2\_indices = heights >= 170\n",

"\n",

"# Calculate means of each subset\n",

"subset1\_mean = np.mean(data[subset1\_indices], axis=0)\n",

"subset2\_mean = np.mean(data[subset2\_indices], axis=0)\n",

"\n",

"print(\"Subset 1 Mean (heights < 170):\", subset1\_mean)\n",

"print(\"Subset 2 Mean (heights >= 170):\", subset2\_mean)\n",

"\n",

"# Plot distribution of sample means\n",

"subset\_means = [subset1\_mean, subset2\_mean]\n",

"labels = ['Heights < 170', 'Heights >= 170']\n",

"\n",

"plt.figure(figsize=(8, 6))\n",

"plt.bar(np.arange(len(subset\_means)), [m[0] for m in subset\_means], tick\_label=labels, color=['blue', 'green'])\n",

"plt.xlabel('Subset')\n",

"plt.ylabel('Mean Height')\n",

"plt.title('Distribution of Sample Means')\n",

"plt.grid(axis='y', linestyle='--', alpha=0.7)\n",

"plt.show()\n"

],

"metadata": {

"id": "SIMpL629PQJf",

"colab": {

"base\_uri": "https://localhost:8080/",

"height": 599

},

"outputId": "459433ad-770e-43dd-c53c-bfe34822eca0"

},

"execution\_count": 18,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"Subset 1 Mean (heights < 170): [162.06586165 70.27758326]\n",

"Subset 2 Mean (heights >= 170): [177.78344836 69.83746024]\n"

]

},

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<Figure size 800x600 with 1 Axes>"

],

"image/png": "\n"

},

"metadata": {}

}

]

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"import matplotlib.pyplot as plt\n",

"\n",

"# Generate sample data (heights and weights)\n",

"np.random.seed(0) # For reproducibility\n",

"heights = np.random.normal(loc=170, scale=10, size=1000) # Mean=170, Std=10\n",

"weights = np.random.normal(loc=70, scale=5, size=1000) # Mean=70, Std=5\n",

"\n",

"# Combine heights and weights into a single 2D array\n",

"data = np.column\_stack((heights, weights))\n",

"\n",

"# Number of samples to draw\n",

"num\_samples = 1000\n",

"\n",

"# Sample size for each sample\n",

"sample\_size = 50\n",

"\n",

"# Array to store sample means\n",

"sample\_means = np.zeros(num\_samples)\n",

"\n",

"# Generate samples, calculate means, and store them\n",

"for i in range(num\_samples):\n",

" sample\_indices = np.random.choice(len(data), size=sample\_size, replace=False)\n",

" sample = data[sample\_indices]\n",

" sample\_means[i] = np.mean(sample)\n",

"\n",

"# Plot histogram of sample means\n",

"plt.figure(figsize=(8, 6))\n",

"plt.hist(sample\_means, bins=30, color='skyblue', edgecolor='black', alpha=0.7)\n",

"plt.xlabel('Sample Mean')\n",

"plt.ylabel('Frequency')\n",

"plt.title('Distribution of Sample Means')\n",

"plt.grid(axis='y', linestyle='--', alpha=0.7)\n",

"plt.show()\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/",

"height": 564

},

"id": "LMJgUg28WWHU",

"outputId": "952577ec-0b25-4997-b882-ce28b11c0b50"

},

"execution\_count": 19,

"outputs": [

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<Figure size 800x600 with 1 Axes>"

],

"image/png": "\n"

},

"metadata": {}

}

]

},

{

"cell\_type": "markdown",

"source": [

"#\*\*CONFIDENCE INTERVALS ( CI )\*\*"

],

"metadata": {

"id": "T10diSPUWYKA"

}

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"import matplotlib.pyplot as plt\n",

"\n",

"# Generate sample data (heights)\n",

"np.random.seed(0) # For reproducibility\n",

"heights = np.random.normal(loc=170, scale=10, size=1000) # Mean=170, Std=10\n",

"\n",

"# Number of samples to draw\n",

"num\_samples = 1000\n",

"\n",

"# Sample size for each sample\n",

"sample\_size = 50\n",

"\n",

"# Array to store sample means\n",

"sample\_means = np.zeros(num\_samples)\n",

"\n",

"# Generate samples, calculate means, and store them\n",

"for i in range(num\_samples):\n",

" sample = np.random.choice(heights, size=sample\_size, replace=False)\n",

" sample\_means[i] = np.mean(sample)\n",

"\n",

"# Plot histogram of sample means\n",

"plt.figure(figsize=(8, 6))\n",

"plt.hist(sample\_means, bins=30, color='skyblue', edgecolor='black', alpha=0.7)\n",

"plt.xlabel('Sample Mean (Heights)')\n",

"plt.ylabel('Frequency')\n",

"plt.title('Distribution of Sample Means (Heights)')\n",

"plt.grid(axis='y', linestyle='--', alpha=0.7)\n",

"plt.show()\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/",

"height": 564

},

"id": "9-1-UTQEWhco",

"outputId": "ffb87011-6118-4dba-aacc-002e06c84d0e"

},

"execution\_count": 20,

"outputs": [

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<Figure size 800x600 with 1 Axes>"

],

"image/png": "\n"

},

"metadata": {}

}

]

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"from scipy.stats import t\n",

"\n",

"# Generate sample data (heights and weights)\n",

"np.random.seed(0) # For reproducibility\n",

"heights = np.random.normal(loc=170, scale=10, size=1000) # Mean=170, Std=10\n",

"weights = np.random.normal(loc=70, scale=5, size=1000) # Mean=70, Std=5\n",

"\n",

"# Function to calculate confidence interval\n",

"def confidence\_interval(data, confidence=0.95):\n",

" n = len(data)\n",

" mean = np.mean(data)\n",

" stderr = np.std(data, ddof=1) / np.sqrt(n)\n",

" margin\_error = stderr \* t.ppf((1 + confidence) / 2, n - 1)\n",

" return mean - margin\_error, mean + margin\_error\n",

"\n",

"# Calculate confidence interval for heights\n",

"heights\_ci = confidence\_interval(heights)\n",

"print(\"95% Confidence Interval for Heights Mean:\", heights\_ci)\n",

"\n",

"# Calculate confidence interval for weights\n",

"weights\_ci = confidence\_interval(weights)\n",

"print(\"95% Confidence Interval for Weights Mean:\", weights\_ci)\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "g64cdZ0iWvEn",

"outputId": "95211fda-ddf9-4a59-e265-cb059f5af97d"

},

"execution\_count": 21,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"95% Confidence Interval for Heights Mean: (168.93462612126612, 170.16023972893)\n",

"95% Confidence Interval for Weights Mean: (69.76754007444453, 70.3686293287171)\n"

]

}

]

},

{

"cell\_type": "markdown",

"source": [

"#\*\*HYPOTHESIS TESTING\*\*"

],

"metadata": {

"id": "-mz1WT27XJd5"

}

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"from scipy.stats import ttest\_1samp\n",

"\n",

"# Generate sample data (heights)\n",

"np.random.seed(0) # For reproducibility\n",

"heights = np.random.normal(loc=170, scale=10, size=1000) # Mean=170, Std=10\n",

"\n",

"# Hypothesized mean height\n",

"hypothesized\_mean = 175\n",

"\n",

"# Perform t-test\n",

"t\_statistic, p\_value = ttest\_1samp(heights, hypothesized\_mean)\n",

"\n",

"# Define significance level\n",

"alpha = 0.05\n",

"\n",

"# Print t-test results\n",

"print(\"T-statistic:\", t\_statistic)\n",

"print(\"P-value:\", p\_value)\n",

"\n",

"# Check if null hypothesis should be rejected\n",

"if p\_value < alpha:\n",

" print(\"Reject null hypothesis: Mean height is significantly different from\", hypothesized\_mean, \"cm.\")\n",

"else:\n",

" print(\"Fail to reject null hypothesis: Mean height is not significantly different from\", hypothesized\_mean, \"cm.\")\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "d0VWfC8nXR\_o",

"outputId": "c328794c-a488-4696-bea6-27840dec060c"

},

"execution\_count": 22,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"T-statistic: -17.460312734428076\n",

"P-value: 8.727273626558908e-60\n",

"Reject null hypothesis: Mean height is significantly different from 175 cm.\n"

]

}

]

},

{

"cell\_type": "code",

"source": [

"# Define significance level\n",

"alpha = 0.05\n",

"\n",

"# Print T-test results\n",

"print(\"T-statistic:\", t\_statistic)\n",

"print(\"P-value:\", p\_value)\n",

"\n",

"# Check if null hypothesis should be rejected\n",

"if p\_value < alpha:\n",

" print(\"Reject null hypothesis: Mean height is significantly different from mean weight.\")\n",

"else:\n",

" print(\"Fail to reject null hypothesis: Mean height is not significantly different from mean weight.\")\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "xnRr-y43cqWT",

"outputId": "f311cb16-9edb-42d7-8f65-005b8739d115"

},

"execution\_count": 26,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"T-statistic: 286.0092957912429\n",

"P-value: 0.0\n",

"Reject null hypothesis: Mean height is significantly different from mean weight.\n"

]

}

]

},

{

"cell\_type": "markdown",

"source": [

"#\*\*CRITICAL REGIONS, LEVEL OF SIGNIFICANCE, AND ERROR TYPES\*\*"

],

"metadata": {

"id": "8rcTlfc7c16s"

}

},

{

"cell\_type": "code",

"source": [

"from scipy.stats import norm\n",

"\n",

"# Define significance level\n",

"alpha = 0.05\n",

"\n",

"# Find critical values\n",

"lower\_critical\_value = norm.ppf(alpha / 2)\n",

"upper\_critical\_value = norm.ppf(1 - alpha / 2)\n",

"\n",

"print(\"Lower Critical Value (L):\", lower\_critical\_value)\n",

"print(\"Upper Critical Value (U):\", upper\_critical\_value)\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "6t9jV9qTc9T6",

"outputId": "d1d4043e-e9b0-4157-ee0f-570bded633e7"

},

"execution\_count": 27,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"Lower Critical Value (L): -1.9599639845400545\n",

"Upper Critical Value (U): 1.959963984540054\n"

]

}

]

},

{

"cell\_type": "markdown",

"source": [

"#\*\*CHOSSING P-VALUES FROM TABLES\*\*"

],

"metadata": {

"id": "5DpBv1n7ebQq"

}

},

{

"cell\_type": "code",

"source": [

"from scipy.stats import norm\n",

"\n",

"# Define significance level (alpha)\n",

"alpha = 0.05 # You can change this to your desired significance level\n",

"\n",

"# Find the critical value from the z-table\n",

"critical\_value = norm.ppf(1 - alpha/2) # For a two-tailed test\n",

"\n",

"print(\"Critical Value from z-table:\", critical\_value)\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "uNu6Ox71ee-c",

"outputId": "4417379d-89b6-4a0a-9a37-7a22130ebe84"

},

"execution\_count": 33,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"Critical Value from z-table: 1.959963984540054\n"

]

}

]

},

{

"cell\_type": "markdown",

"source": [

"#\*\*FEATURE SELECTION USING P-VALUES\*\*"

],

"metadata": {

"id": "MwyPdNmZf5kr"

}

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"from sklearn.linear\_model import LinearRegression\n",

"import matplotlib.pyplot as plt\n",

"\n",

"# Generate sample data (heights and weights)\n",

"np.random.seed(0) # For reproducibility\n",

"heights = np.random.normal(loc=170, scale=10, size=100) # Mean=170, Std=10\n",

"weights = np.random.normal(loc=70, scale=5, size=100) # Mean=70, Std=5\n",

"\n",

"# Reshape heights for sklearn\n",

"heights = heights.reshape(-1, 1)\n",

"\n",

"# Fit linear regression model\n",

"model = LinearRegression()\n",

"model.fit(heights, weights)\n",

"\n",

"# Predict weights based on heights\n",

"predicted\_weights = model.predict(heights)\n",

"\n",

"# Plot the data and the linear regression line\n",

"plt.scatter(heights, weights, color='blue', label='Actual Data')\n",

"plt.plot(heights, predicted\_weights, color='red', label='Linear Regression')\n",

"plt.xlabel('Heights')\n",

"plt.ylabel('Weights')\n",

"plt.title('Linear Regression: Predicting Weights from Heights')\n",

"plt.legend()\n",

"plt.show()\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/",

"height": 472

},

"id": "YKF61Dbhf9zq",

"outputId": "fbeb1827-5144-4160-a7d5-ed38f45f3031"

},

"execution\_count": 37,

"outputs": [

{

"output\_type": "display\_data",

"data": {

"text/plain": [

"<Figure size 640x480 with 1 Axes>"

],

"image/png": "\n"

},

"metadata": {}

}

]

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"from scipy.stats import t\n",

"from sklearn.linear\_model import LinearRegression\n",

"\n",

"# Generate sample data (heights and weights)\n",

"np.random.seed(0) # For reproducibility\n",

"heights = np.random.normal(loc=170, scale=10, size=100) # Mean=170, Std=10\n",

"weights = np.random.normal(loc=70, scale=5, size=100) # Mean=70, Std=5\n",

"\n",

"# Reshape heights for sklearn\n",

"heights = heights.reshape(-1, 1)\n",

"\n",

"# Fit linear regression model\n",

"model = LinearRegression()\n",

"model.fit(heights, weights)\n",

"\n",

"# Perform hypothesis test\n",

"coeff = model.coef\_[0] # Coefficient for heights\n",

"n = len(weights) # Sample size\n",

"df = n - 2 # Degrees of freedom\n",

"alpha = 0.05 # Significance level\n",

"\n",

"# Compute standard error of coefficient estimate\n",

"stderr = np.sqrt(np.sum((weights - model.predict(heights))\*\*2) / (n - 2)) / np.sqrt(np.sum((heights - np.mean(heights))\*\*2))\n",

"\n",

"# Compute t-statistic\n",

"t\_statistic = coeff / stderr\n",

"\n",

"# Compute critical value from t-distribution\n",

"critical\_value = t.ppf(1 - alpha/2, df)\n",

"\n",

"# Compute p-value\n",

"p\_value = 2 \* (1 - t.cdf(abs(t\_statistic), df))\n",

"\n",

"# Print results\n",

"print(\"Coefficient:\", coeff)\n",

"print(\"Standard Error of Coefficient Estimate:\", stderr)\n",

"print(\"T-statistic:\", t\_statistic)\n",

"print(\"Critical Value from t-distribution:\", critical\_value)\n",

"print(\"P-value:\", p\_value)\n",

"\n",

"# Check if coefficient is statistically significant\n",

"if abs(t\_statistic) > critical\_value:\n",

" print(\"Reject null hypothesis: The coefficient for heights is statistically significant.\")\n",

"else:\n",

" print(\"Fail to reject null hypothesis: The coefficient for heights is not statistically significant.\")\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "\_K50KC90gg7R",

"outputId": "951da811-e8a4-4919-a84a-22056fe82cf8"

},

"execution\_count": 38,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"Coefficient: 0.05734921677319049\n",

"Standard Error of Coefficient Estimate: 0.051525233430015374\n",

"T-statistic: 1.1130316731332348\n",

"Critical Value from t-distribution: 1.984467454426692\n",

"P-value: 0.2684175102171562\n",

"Fail to reject null hypothesis: The coefficient for heights is not statistically significant.\n"

]

}

]

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"from sklearn.linear\_model import LinearRegression\n",

"from scipy.stats import t\n",

"\n",

"# Generate sample data (heights and weights)\n",

"np.random.seed(0) # For reproducibility\n",

"heights = np.random.normal(loc=170, scale=10, size=100) # Mean=170, Std=10\n",

"weights = np.random.normal(loc=70, scale=5, size=100) # Mean=70, Std=5\n",

"\n",

"# Reshape heights for sklearn\n",

"heights = heights.reshape(-1, 1)\n",

"\n",

"# Fit linear regression model\n",

"model = LinearRegression()\n",

"model.fit(heights, weights)\n",

"\n",

"# Perform hypothesis test\n",

"coeff = model.coef\_[0] # Coefficient for heights\n",

"n = len(weights) # Sample size\n",

"df = n - 2 # Degrees of freedom\n",

"alpha = 0.05 # Significance level\n",

"\n",

"# Compute standard error of coefficient estimate\n",

"stderr = np.sqrt(np.sum((weights - model.predict(heights))\*\*2) / (n - 2)) / np.sqrt(np.sum((heights - np.mean(heights))\*\*2))\n",

"\n",

"# Compute t-statistic\n",

"t\_statistic = coeff / stderr\n",

"\n",

"# Compute p-value\n",

"p\_value = 2 \* (1 - t.cdf(abs(t\_statistic), df))\n",

"\n",

"# Print results\n",

"print(\"P-value:\", p\_value)\n",

"\n",

"# Decision: Include or exclude variable based on p-value\n",

"if p\_value < alpha:\n",

" print(\"Include variable 'heights' in the model (statistically significant).\")\n",

"else:\n",

" print(\"Exclude variable 'heights' from the model (not statistically significant).\")\n"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "pBjTi0FCg2la",

"outputId": "cbd829f1-8e75-4b0e-8c7c-38bcd7bbd73c"

},

"execution\_count": 39,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"P-value: 0.2684175102171562\n",

"Exclude variable 'heights' from the model (not statistically significant).\n"

]

}

]

}

]

}