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" buttonEl.style.display =\n",

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

"\n",

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

" const element = document.querySelector('#df-7240ff59-fe76-4619-b130-fa16ea943130');\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",

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" <path d=\"M18.56 5.44l.94 2.06.94-2.06 2.06-.94-2.06-.94-.94-2.06-.94 2.06-2.06.94zm-11 1L8.5 8.5l.94-2.06 2.06-.94-2.06-.94L8.5 2.5l-.94 2.06-2.06.94zm10 10l.94 2.06.94-2.06 2.06-.94-2.06-.94-.94-2.06-.94 2.06-2.06.94z\"/><path d=\"M17.41 7.96l-1.37-1.37c-.4-.4-.92-.59-1.43-.59-.52 0-1.04.2-1.43.59L10.3 9.45l-7.72 7.72c-.78.78-.78 2.05 0 2.83L4 21.41c.39.39.9.59 1.41.59.51 0 1.02-.2 1.41-.59l7.78-7.78 2.81-2.81c.8-.78.8-2.07 0-2.86zM5.41 20L4 18.59l7.72-7.72 1.47 1.35L5.41 20z\"/>\n",

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" display: none;\n",

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" width: 32px;\n",

" }\n",

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" fill: #174EA6;\n",

" }\n",

"\n",

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" 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-204ba954-2167-4427-b93c-2b3b26e6b6f4 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-204ba954-2167-4427-b93c-2b3b26e6b6f4');\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",

" </div>\n",

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"data": {

"text/plain": [

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"execution\_count": 56

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"df1.shape"

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"metadata": {},

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"outputId": "40eb8d1e-ac34-41d9-88dd-ec3ceeed3b1b"

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"text/plain": [

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"metadata": {},

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"YEAR False\n",

"JAN False\n",

"FEB False\n",

"MAR False\n",

"APR False\n",

"MAY False\n",

"JUN False\n",

"JUL False\n",

"AUG False\n",

"SEP False\n",

"OCT False\n",

"NOV False\n",

"DEC False\n",

"ANNUAL False\n",

"Jan-Feb False\n",

"Mar-May False\n",

"Jun-Sep False\n",

"Oct-Dec False\n",

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"YEAR False\n",

"JAN False\n",

"FEB False\n",

"MAR False\n",

"APR False\n",

"MAY False\n",

"JUN False\n",

"JUL False\n",

"AUG False\n",

"SEP False\n",

"OCT False\n",

"NOV False\n",

"DEC False\n",

"ANNUAL False\n",

"Jan-Feb False\n",

"Mar-May False\n",

"Jun-Sep False\n",

"Oct-Dec False\n",

"dtype: bool"

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"YEAR False\n",

"JAN False\n",

"FEB False\n",

"MAR False\n",

"APR False\n",

"MAY False\n",

"JUN False\n",

"JUL False\n",

"AUG False\n",

"SEP False\n",

"OCT False\n",

"NOV False\n",

"DEC False\n",

"ANNUAL False\n",

"Jan-Feb False\n",

"Mar-May False\n",

"Jun-Sep False\n",

"Oct-Dec False\n",

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"1993 36\n",

"1971 36\n",

"1970 36\n",

"1994 36\n",

" ..\n",

"1927 35\n",

"1917 34\n",

"1943 34\n",

"1903 34\n",

"1909 34\n",

"Name: YEAR, Length: 115, dtype: int64"

]

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"metadata": {},

"execution\_count": 62

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"print (subs)\n",

"print ('TOTAL SUBDIVISIONS: ', len(subs))"

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"metadata": {

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"outputId": "fc997d4c-2205-46f7-c3bd-38d9bc1136cd"

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" 'NAGA MANI MIZO TRIPURA' 'SUB HIMALAYAN WEST BENGAL & SIKKIM'\n",

" 'GANGETIC WEST BENGAL' 'ORISSA' 'JHARKHAND' 'BIHAR' 'EAST UTTAR PRADESH'\n",

" 'WEST UTTAR PRADESH' 'UTTARAKHAND' 'HARYANA DELHI & CHANDIGARH' 'PUNJAB'\n",

" 'HIMACHAL PRADESH' 'JAMMU & KASHMIR' 'WEST RAJASTHAN' 'EAST RAJASTHAN'\n",

" 'WEST MADHYA PRADESH' 'EAST MADHYA PRADESH' 'GUJARAT REGION'\n",

" 'SAURASHTRA & KUTCH' 'KONKAN & GOA' 'MADHYA MAHARASHTRA' 'MATATHWADA'\n",

" 'VIDARBHA' 'CHHATTISGARH' 'COASTAL ANDHRA PRADESH' 'TELANGANA'\n",

" 'RAYALSEEMA' 'TAMIL NADU' 'COASTAL KARNATAKA' 'NORTH INTERIOR KARNATAKA'\n",

" 'SOUTH INTERIOR KARNATAKA' 'KERALA' 'LAKSHADWEEP']\n",

"TOTAL SUBDIVISIONS: 36\n"

]

}

]

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{

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"unique\_state\_counts\_yearwise = df.groupby(by='YEAR')[['SUBDIVISION']].count()['SUBDIVISION'].value\_counts()\n",

"\n",

"print (unique\_state\_counts\_yearwise)"

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"34 4\n",

"Name: SUBDIVISION, dtype: int64\n"

]

}

]

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{

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"state\_count = df.groupby(by='SUBDIVISION')[['ANNUAL']].count().sort\_values(by='ANNUAL')\n",

"print (state\_count.head(10))"

],

"metadata": {

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"SUBDIVISION \n",

"ARUNACHAL PRADESH 91\n",

"LAKSHADWEEP 103\n",

"ANDAMAN & NICOBAR ISLANDS 104\n",

"COASTAL KARNATAKA 114\n",

"JAMMU & KASHMIR 114\n",

"WEST MADHYA PRADESH 114\n",

"VIDARBHA 115\n",

"UTTARAKHAND 115\n",

"TELANGANA 115\n",

"TAMIL NADU 115\n"

]

}

]

},

{

"cell\_type": "code",

"source": [

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"print (state\_count.head())"

],

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"ARUNACHAL PRADESH 91\n",

"LAKSHADWEEP 103\n",

"ANDAMAN & NICOBAR ISLANDS 104\n",

"COASTAL KARNATAKA 114\n",

"JAMMU & KASHMIR 114\n"

]

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]

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"overall.head()"

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"SUBDIVISION \n",

"COASTAL KARNATAKA 388558.7\n",

"KONKAN & GOA 342433.9\n",

"KERALA 336431.1\n",

"SUB HIMALAYAN WEST BENGAL & SIKKIM 316505.0\n",

"ARUNACHAL PRADESH 311116.0"

],

"text/html": [

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

" <div>\n",

"<style scoped>\n",

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" 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>ANNUAL</th>\n",

" </tr>\n",

" <tr>\n",

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

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

" </tr>\n",

" </thead>\n",

" <tbody>\n",

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" <td>388558.7</td>\n",

" </tr>\n",

" <tr>\n",

" <th>KONKAN &amp; GOA</th>\n",

" <td>342433.9</td>\n",

" </tr>\n",

" <tr>\n",

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

" <td>336431.1</td>\n",

" </tr>\n",

" <tr>\n",

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" <td>316505.0</td>\n",

" </tr>\n",

" <tr>\n",

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

" <td>311116.0</td>\n",

" </tr>\n",

" </tbody>\n",

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"</div>\n",

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" 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 0 24 24\"\n",

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

" <path d=\"M0 0h24v24H0V0z\" fill=\"none\"/>\n",

" <path d=\"M18.56 5.44l.94 2.06.94-2.06 2.06-.94-2.06-.94-.94-2.06-.94 2.06-2.06.94zm-11 1L8.5 8.5l.94-2.06 2.06-.94-2.06-.94L8.5 2.5l-.94 2.06-2.06.94zm10 10l.94 2.06.94-2.06 2.06-.94-2.06-.94-.94-2.06-.94 2.06-2.06.94z\"/><path d=\"M17.41 7.96l-1.37-1.37c-.4-.4-.92-.59-1.43-.59-.52 0-1.04.2-1.43.59L10.3 9.45l-7.72 7.72c-.78.78-.78 2.05 0 2.83L4 21.41c.39.39.9.59 1.41.59.51 0 1.02-.2 1.41-.59l7.78-7.78 2.81-2.81c.8-.78.8-2.07 0-2.86zM5.41 20L4 18.59l7.72-7.72 1.47 1.35L5.41 20z\"/>\n",

" </svg>\n",

" </button>\n",

" \n",

" <style>\n",

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" display:flex;\n",

" flex-wrap:wrap;\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",

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" fill: #174EA6;\n",

" }\n",

"\n",

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" fill: #D2E3FC;\n",

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" 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",

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" buttonEl.style.display =\n",

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

"\n",

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

" const element = document.querySelector('#df-5a914464-a7cf-4ac1-a7c1-eea15b61d4dd');\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",

" </div>\n",

" "

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]

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"lowest\_sub = overall.index.values[-1]\n",

"print ('Highest rain in: ', highest\_sub)\n",

"print ('Lowest rain in: ', lowest\_sub)"

],

"metadata": {

"colab": {

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"id": "7o5ubMmYu\_Jy",

"outputId": "a6fadc94-d725-43c6-d459-6ccc7282f091"

},

"execution\_count": 71,

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"output\_type": "stream",

"name": "stdout",

"text": [

"Highest rain in: COASTAL KARNATAKA\n",

"Lowest rain in: WEST RAJASTHAN\n"

]

}

]

}

]

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