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    "# Project - Pakistan Violent & Threatening Healthcare\n",
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    "In this project, we will be looking at two datasets that include information on
violent and threatening incidents that impact aid operations, civilians, education,
healthcare, refugees and IDPs in Pakistan. All of this is to make sure that the
staff is safe and that hopefully there will be better response outcomes in the
future. The link to have access to the two datasets is
[here](https://www.kaggle.com/datasets/amaanfaheem/pakistan-violent-and-threatening-
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    "Some of the goals that we want to work with for the 2016-2022 dataset are the
following:\n",
    "1. **Which years have the most crime? Of the years that have the most crime,
which year was worst?**\n",
    "2. **Which weapon was used mostly? Of the most frequent weapon, which year was
that frequent weapon used the most?**\n",
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    "For the 2019 dataset, we can focus on these goals:\n",
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crime, which month was worse?**\n",
    "2. **Which Provinces had the most crime?**"
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       "6                       Afghan National Police   \n",
       "7                     Unidentified armed actor   \n",
       "8   Islamic State Khorasan Province (Afghanistan)   \n",
       "9                              Pakistan Police   \n",
       "10                TTP Tehrik-i-Taliban Pakistan   \n",
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Count  Dtype  \n",
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non-null     object \n",
      " 8   Health Workers Arrested                                  18
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non-null     object \n",
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non-null     object \n",
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non-null     object \n",
      " 25  COVID-19-Related Violence                                17
non-null     object \n",
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non-null     object \n",
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non-null     object \n",
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    "data_1.info()"
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    "data_1.shape"
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goals:\n",
    "data_1 = data_1[[\"Date\", \"Reported Perpetrator\", \"Weapon carried or
used\", \"Health Workers Killed\", \"Health Workers Kidnapped\",\n",
    "\"Health Workers Arrested\", \"Health Workers Injured\", \"Health Workers
Assaulted\",\"Health Workers Sexually Assaulted\"]]"
   ]
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    "data_1 = data_1[1:]"
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   "outputs": [],
   "source": [
    "# Converting some of the column names from object to integer data type by using
the Series astype method:\n",
    "data_1[\"Health Workers Arrested\"] = data_1[\"Health Workers
Arrested\"].astype('Int64')\n",
    "\n",
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Assaulted\"].astype('Int64')\n",
    "\n",
    "data_1[\"Health Workers Injured\"] = data_1[\"Health Workers
Injured\"].astype('Int64')\n",
    "\n",
    "data_1[\"Health Workers Kidnapped\"] = data_1[\"Health Workers
Kidnapped\"].astype('Int64')\n",
    "\n",
    "data_1[\"Health Workers Killed\"] = data_1[\"Health Workers
Killed\"].astype('Int64')\n",
    "\n",
    "data_1[\"Health Workers Arrested\"] = data_1[\"Health Workers
Arrested\"].astype('Int64')\n",
    "\n",
    "data_1[\"Health Workers Sexually Assaulted\"] = data_1[\"Health Workers
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UserWarning: Parsing dates in %d/%m/%Y format when dayfirst=False (the default) was 
specified. Pass `dayfirst=True` or specify a format to silence this warning.\n",
      "  data_1['Date'] = pd.to_datetime(data_1['Date'])\n"
     ]
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    "# Converting the 'Date' column to datetime with the pandas.to_datetime 
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      " 2   Weapon carried or used             17 non-null     object        \n",
      " 3   Health Workers Killed              17 non-null     Int64         \n",
      " 4   Health Workers Kidnapped           17 non-null     Int64         \n",
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\n",
       "\n",
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  \n",
       "2                       1                         0                        0
  \n",
       "3                       2                         0                        0
  \n",
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\n",
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\n",
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\n",
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\n",
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\n",
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    "12                     0                          0                          1   
\n",
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\n",
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\n",
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       "2                                   0  2019     11    8  \n",
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       "5                                   0  2021      1   28  \n",
       "6                                   0  2021      4    9  \n",
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    "# Using the value_counts method to count up how often each Province in the
Province column appears in the 2019 DataFrame:\n",
    "province_counts =
data_2['State/Province/Division/Governorate/Department'].value_counts().sort_index()
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    "# Making a bar plot for the short frequency table of the Provinces:\n",
    "sns.barplot(x=province_counts.index, y=province_counts.to_numpy())\n",
    "plt.ylabel('Frequency')\n",
    "plt.xticks(rotation = 60)"
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    "In conclusion, we can see that there were a lot of crimes within the healthcare system in Pakistan. However, it is important to point out that there were severaly missing values in both of the data frames. The data frames also get updated so chances are our results from this project can change. It is important to pick columns that do not have many missing values because if we choose columns that had missing values then we cannot jump to conclusions because we have no idea what the value of our missing values are."
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