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     ],
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       "## 4.2 Create an array of 10 fives?"
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     "metadata": {
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       "zeros=np.zeros(10)"
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     "execution_count": 11,
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  "outputs": []
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  "cell_type": "code",
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   "print(zeros,fives)"
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  "source": [
```

```
    "## 5. Create an array of all the even integers from 20 to 35"
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   "source": [
    "arr=[i for i in range(20,35+1) if i%2==0]\n",
    "arr"
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      "text/plain": [
       "[20, 22, 24, 26, 28, 30, 32, 34]"
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     "metadata": {},
```

```
    "execution_count": 16
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  ]
 },
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   "array=np.arange(0,9).reshape((3,3))\n",
   "array"
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  "metadata": {
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   "outputId": "a8144bde-e4e9-46ac-f89b-22306e71c7bd",
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  "execution_count": 20,
  "outputs": [
   {
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```
    "output_type": "execute_result",
    "data": {
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      "       [3, 4, 5],\n",
      "       [6, 7, 8]])"
     ]
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    "metadata": {},
    "execution_count": 20
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  ]
 },
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  "cell_type": "markdown",
  "source": [
   "## 7. Concatenate a and b \n",
   "## a = np.array([1, 2, 3]), b = np.array([4, 5, 6])"
  ],
  "metadata": {
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  "source": [
   "a = np.array([1, 2, 3])\n",
   "b = np.array([4, 5, 6])\n",
   "c=np.concatenate((a,b))\n",
```

```
    "c"
   ],
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    "outputId": "7c0390f6-80f7-4bcf-a20d-0456883124a2",
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     "data": {
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     "execution_count": 27
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   "metadata": {
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  {
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    "import pandas as pd\n"
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    "d={'name':['raj','jhon','joe'],'age':[21,26,28]}\n",
    "df=pd.DataFrame.from_dict(d)\n",
    "df"
```

```
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        "1  jhon   26\n",
        "2   joe   28"
      ],
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        "    <div 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",
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"      <th></th>\n",
"      <th>name</th>\n",
"      <th>age</th>\n",
"    </tr>\n",
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"      <td>raj</td>\n",
"      <td>21</td>\n",
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"      <th>1</th>\n",
"      <td>jhon</td>\n",
"      <td>26</td>\n",
"    </tr>\n",
"    <tr>\n",
```

```
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"     <td>joe</td>\n",
"     <td>28</td>\n",
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"      gap: 12px;\n",
"    }\n",
"\n",
```

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"      width: 32px;\n",
"    }\n",
"\n",
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"      fill: #174EA6;\n",
"    }\n",
"\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",
```

```
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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-598e9ee5-fb74-4a51-acc5-099517bc009e');\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",
```

```
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      "               '2023-01-05', '2023-01-06', '2023-01-07', '2023-01-08',\n",
      "               '2023-01-09', '2023-01-10',\n",
      "               ...\n",
      "               '2023-09-23', '2023-09-24', '2023-09-25', '2023-09-26',\n",
      "               '2023-09-27', '2023-09-28', '2023-09-29', '2023-09-30',\n",
      "               '2023-10-01', '2023-10-02'],\n",
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   "## 10. Create 2D list to DataFrame\n",
   "\n",
   "lists = [[1, 'aaa', 22],\n",
   "         [2, 'bbb', 25],\n",
```

```
    "        [3, 'ccc', 24]]"
   ],
   "metadata": {
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  {
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    "df"
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    "outputId": "1f47a5ef-d884-493b-85a7-4e462c85d335",
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```
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    "1   2  bbb  25\n",
    "2   3  ccc  24"
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    "      <div>\n",
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    "        vertical-align: middle;\n",
    "    }\n",
    "\n",
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    "        vertical-align: top;\n",
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    "    .dataframe thead th {\n",
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```

```
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"      <th>C2</th>\n",
"      <th>C3</th>\n",
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"      <td>aaa</td>\n",
"      <td>22</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>1</th>\n",
"      <td>2</td>\n",
"      <td>bbb</td>\n",
"      <td>25</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>2</th>\n",
"      <td>3</td>\n",
"      <td>ccc</td>\n",
"      <td>24</td>\n",
```

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

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"      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",
"    [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",
```

```
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        "         document.querySelector('#df-fef6f28e-9431-4092-82cd-da1a9e44b091 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-fef6f28e-9431-4092-82cd-da1a9e44b091');\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",
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       ]
```

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