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    "### Output should be: The diameter of Earth is 12742 kilometers."
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    "planet = \"Earth\"\n",
    "diameter = 12742"
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    "d =
{'k1': [1,2,3,{'tricky': ['oh', 'man', 'inception', {'target': [1,2,3, 'hello']}]}]}]"
  ],
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    "print(d['k1'][3]['tricky'][3]['target'][3])"
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        }
    ]
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        "### 5. Create an array of all the even integers from 20 to 35"
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      "array=np.arange(20,35,2) "
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    },
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    "outputs": []
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      "print(array) "
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        ]
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      "## 6. Create a 3x3 matrix with values ranging from 0 to 8"
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      "x = np.arange(0,9).reshape(3,3) "
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    },
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  "print(x)"
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      "[[0 1 2]\n",
      " [3 4 5]\n",
      " [6 7 8]]\n"
    ]
  }
]
},
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    "## 7. Concatenate a and b \n",
    "## a = np.array([1, 2, 3]), b = np.array([4, 5, 6])"
  ],
  "metadata": {
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    "a=([1, 2,3])"
  ],
  "metadata": {
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  "execution_count": null,
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    "b=([4,5,6])"
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  "execution_count": null,
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        "x=np.concatenate((a, b))"
    ],
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            "text": [
                "[1 2 3 4 5 6]\n"
            ]
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    ]
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        "### 8. Create a dataframe with 3 rows and 2 columns"
    ],
    "metadata": {
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{
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    "source": [
        "import pandas as pd"
    ],
    "metadata": {
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    },
    "execution_count": null,

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```

    "outputs": []
  },
  {
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    "source": [
      "A=[]"
    ],
    "metadata": {
      "id": "xNpI_XXoYhs0"
    },
    "execution_count": null,
    "outputs": []
  },
  {
    "cell_type": "code",
    "source": [
      "f=pd.DataFrame(A, columns=['a', 'b'], index=['1', '2', '3'])"
    ],
    "metadata": {
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    },
    "execution_count": null,
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    "cell_type": "code",
    "source": [
      "print(f)"
    ],
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          "1  NaN  NaN\n",
          "2  NaN  NaN\n",
          "3  NaN  NaN\n"
        ]
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    ]
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      "## 9. Generate the series of dates from 1st Jan, 2023 to 10th Feb, 2023"
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    }
  },
  {
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    "source": [
      "perl = pd.date_range(start = '1-1-2023', end = '10-02-2023') "
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      "for val in perl:\n",
      "    print(val)"
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    "source": [
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        "\n",
        "lists = [[1, 'aaa', 22],\n",
        "           [2, 'bbb', 25],\n",
        "           [3, 'ccc', 24]]"
    ],
    "metadata": {
        "id": "ZizSetD-y5az"
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    "source": [
        "lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]"
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    "metadata": {
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    "execution_count": null,
    "outputs": []
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        "l= pd.DataFrame(lists)"
    ],
    "metadata": {
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"source": [
  "print(1)"
],
"metadata": {
  "id": "uLhHvxsIf2Mn",
  "outputId": "c7b79d16-b458-4e41-b546-b43cfea7a9d4",
  "colab": {
    "base_uri": "https://localhost:8080/"
  }
},
"execution_count": null,
"outputs": [
  {
    "output_type": "stream",
    "name": "stdout",
    "text": [
      " 0    1    2\n",
      "0 1  aaa 22\n",
      "1 2  bbb 25\n",
      "2 3  ccc 24\n"
    ]
  }
]
}
```