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    "## 1. Split this string"
   ],
```

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 "execution_count": null,
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  "s = \"Hi there Sam!\"\n",
  "xx = s.split()\n",
  "print(xx)"
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```
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    "['Hi', 'there', 'Sam!']\n"
   ]
  }
]
},
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 "source": [
  "## 2. Use .format() to print the following string. \n",
  "\n",
  "### Output should be: The diameter of Earth is 12742 kilometers."
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 "cell_type": "code",
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  "planet = \" The diameter of Earth \"\n",
  "diameter = \" is 12742 kilometers \"\n",
  "print(planet + diameter.format())\n"
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 "metadata": {
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  "outputId": "3b387ee3-519e-4244-b633-631f306cdd13",
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 "execution_count": null,
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   "text": [
    "The diameter of Earth is 12742 kilometers \n"
   ]
  }
]
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 "id": "HyRyJv6CYPb4"
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 "execution_count": null,
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 "cell_type": "markdown",
 "source": [
  "## 3. In this nest dictionary grab the word \"hello\""
],
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 }
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```
},
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 "cell_type": "code",
 "source": [
  "d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}}\n",
  "d['k1'][3]['tricky'][3]['target'][3]"
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  "outputId": "0bbfcd9a-211a-46e6-a193-6cd07198a8f5",
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   "data": {
    "text/plain": [
     "'hello'"
    ],
    "application/vnd.google.colaboratory.intrinsic+json": {
     "type": "string"
    }
   },
   "metadata": {},
   "execution_count": 62
  }
 ]
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```
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 "print(\"hello\")"
 ],
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 "execution_count": null,
 "outputs": [
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   "name": "stdout",
   "text": [
    "hello\n"
   ]
  }
]
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  "# Numpy"
 ],
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```
}
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  "import numpy as np"
],
 "metadata": {
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},
 "execution_count": null,
 "outputs": []
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  "## 4.2 Create an array of 10 fives?"
],
 "metadata": {
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}
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 "source": [
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  "np.zeros(10)"
],
 "metadata": {
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 "execution_count": null,
 "outputs": [
  {
   "output_type": "execute_result",
   "data": {
    "text/plain": [
     "array([0., 0., 0., 0., 0., 0., 0., 0., 0.])"
    ]
   },
   "metadata": {},
   "execution_count": 6
  }
]
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 "cell_type": "code",
 "source": [
  "DineshAlone=np.ones(10)*5\n",
  "print(DineshAlone)"
],
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  "outputId": "205e5608-1beb-4f05-a433-92ca560eae80",
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   "name": "stdout",
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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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 "source": [
  "array=np.arange(20,35,2)\n",
  "print(array)"
],
 "metadata": {
  "id": "oAI2tbU2Yag-",
  "outputId": "134cf12c-827e-41c6-bee5-fb05f315dbbd",
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 "execution_count": null,
 "outputs": [
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   "output_type": "stream",
   "name": "stdout",
   "text": [
    "[20 22 24 26 28 30 32 34]\n"
   ]
  }
]
},
 "cell_type": "markdown",
 "source": [
  "## 6. Create a 3x3 matrix with values ranging from 0 to 8"
],
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}
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 "source": [
  "import numpy as np\n",
  "x = np.arange(0, 9).reshape(3,3)\n",
  "print(x)\n"
],
 "metadata": {
```

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   "name": "stdout",
   "text": [
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    " [3 4 5]\n",
    " [6 7 8]]\n"
   ]
  }
]
},
 "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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},
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```
"source": [
  "a = np.array([1, 2, 3])n",
  "b = np.array([4, 5, 6])\n",
  "np.concatenate((a, b), axis=0)\n"
],
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   "data": {
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     "array([1, 2, 3, 4, 5, 6])"
    ]
   },
   "metadata": {},
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  "# Pandas"
],
```

```
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],
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}
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 "source": [
  "import pandas as pd\n",
  "\n",
  "df = \{ 'col_1' : [0, 1, 2, 3], \n", 
        'col_2': [4, 5, 6, 7]}\n",
  "df = pd.DataFrame(df)\n",
  "print(df)\n"
],
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  "outputId": "6e62dc11-b9bb-4b67-f12c-4a2ec853ba9c",
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 },
 "execution_count": null,
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   "name": "stdout",
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   " col_1 col_2\n",
   "0 0 4\n",
   "1 1 5\n",
    "2 2 6\n",
   "3 3 7\n"
  ]
 }
]
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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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  "import pandas as pd\n",
  "dRan1 = pd.date_range(start ='1-1-2023',\n",
         end ='10-01-2023', freq ='M')\n",
  "\n",
  " \n",
  "print(dRan1)"
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   "name": "stdout",
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             '2023-05-31', '2023-06-30', '2023-07-31', '2023-08-31',\n",
             '2023-09-30'],\n",
             dtype='datetime64[ns]', freq='M')\n"
   ]
  }
 ]
```

```
},
{
 "cell_type": "markdown",
 "source": [
  "## 10. Create 2D list to DataFrame\n",
  "\n",
  "lists = [[1, 'aaa', 22],\n",
        [2, 'bbb', 25],\n",
        [3, 'ccc', 24]]"
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 "cell_type": "code",
 "source": [
  "\n",
  "import pandas as pd\n",
  "arr= np.arraylists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]\n",
  "df=pd.DataFrame(arr)\n",
  "print(df)"
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      "0 1 aaa 22\n",
      "1 2 bbb 25\n",
      "2 3 ccc 24\n"
     ]
    }
   ]
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