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"# Basic Python"

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"metadata": {

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"## 1. Split this string"

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"metadata": {

"id": "CU48hgo4Owz5"

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"cell\_type": "code",

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"s = \"Hi there Sam!\""

],

"metadata": {

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"s=s.spilt()\n",

"print(s);\n"

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"\u001b[0;31mAttributeError\u001b[0m: 'str' object has no attribute 'spilt'"

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"## 2. Use .format() to print the following string. \n",

"\n",

"### Output should be: The diameter of Earth is 12742 kilometers."

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"metadata": {

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"source": [

"planet = \"Earth\"\n",

"diameter = 12742"

],

"metadata": {

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"execution\_count": null,

"outputs": []

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"print('the diameter of {} is {} kilometers.'format(planet,diameter));"

],

"metadata": {

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"execution\_count": null,

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"## 3. In this nest dictionary grab the word \"hello\""

],

"metadata": {

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"d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}"

],

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"execution\_count": null,

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"print(d'[k1][3][\"trichy\"][3]['target'][3])"

],

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"# Numpy"

],

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"## 4.1 Create an array of 10 zeros? \n",

"## 4.2 Create an array of 10 fives?"

],

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"import numpy as np\n",

"array=np.zeroes(10)\n",

"print(an array of 10 zeroes;\")\n",

"print(array)"

],

"metadata": {

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"execution\_count": null,

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"import numpy as np\n",

"array=np.ones(10)\*5\n",

"print(\"an array of 10 fives:\")\n",

"print(array)"

],

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"execution\_count": null,

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"## 5. Create an array of all the even integers from 20 to 35"

],

"metadata": {

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}

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{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"array=np.arrange(20,36,2)\n",

"print(\"array of all the even integers from 30 to 70\")\n",

"print(array)"

],

"metadata": {

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"## 6. Create a 3x3 matrix with values ranging from 0 to 8"

],

"metadata": {

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{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"x=np.arrange(0,9).reshape(3,3)\n",

"print(X)"

],

"metadata": {

"id": "tOlEVH7BYceE"

},

"execution\_count": null,

"outputs": []

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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": {

"id": "hQ0dnhAQuU\_p"

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{

"cell\_type": "code",

"source": [

"a=np.arraya((1,2,3))\n",

"b=np.array((4,5,6))\n",

"np.stack((a,b)axis=1)"

],

"metadata": {

"id": "rAPSw97aYfE0"

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"execution\_count": null,

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"cell\_type": "markdown",

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"# Pandas"

],

"metadata": {

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"source": [

"## 8. Create a dataframe with 3 rows and 2 columns"

],

"metadata": {

"id": "ijoYW51zwr87"

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{

"cell\_type": "code",

"source": [

"import pandas as pd\n"

],

"metadata": {

"id": "T5OxJRZ8uvR7"

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"execution\_count": null,

"outputs": []

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"cell\_type": "code",

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"data=[['pavan,'10],['pavan kumar,'13],['sakthi',15]]\n",

"df=pd.dataframe(data,columns=['name,'register no'])df"

],

"metadata": {

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"execution\_count": null,

"outputs": []

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"## 9. Generate the series of dates from 1st Jan, 2023 to 10th Feb, 2023"

],

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"source": [

"import datatime\n",

"#the size of each step in day\_delta=datetime.timedelta(days==1)\n",

"start\_date=datetime.date.today()\n",

"end\_date=start\_date+41\*day\_delta\n",

"for i in range((end\_date-start\_date).days):\n",

" print(start\_date+i\*day\_delta)"

],

"metadata": {

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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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"cell\_type": "code",

"source": [

"import pandas as pd\n",

"lists=[[1,'aaa,'22,][2,'bbb',25][3,'ccc,'24]\n",

"is=pd.dataframe(data,columns=['tag,''number',])df\n"

],

"metadata": {

"id": "\_XMC8aEt0llB"

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"execution\_count": null,

"outputs": []

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"cell\_type": "code",

"source": [],

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"execution\_count": null,

"outputs": []

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