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# -*- coding: utf-8 -*-
"""assignment 1
Automatically generated by Colaboratory.
Original file is located at

https://colab.research.google.com/drive/1AfoS8E5Q3pk9NsPRAitw8IktR0odAlft
"""
# 1.split this string
s='I am Sam!'
s=s.split()
print(s);

#2 Use.format()to print the following string
planet="Earth" diameter=12742
print('the diameter of {} is {} kilometers'.format(planet,diameter))

#3 In this nest dictionary grab the word"hello" d =
{'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}
print(d['k1'][3]["tricky"][3]['target'][3])
"""Numpy"""

#4.1 create an array of 10 zeros
import numpy as np
array=np.zeros(10) print("An
array of 10 zeros:")
print(array)

#4.2 create an array of 10 fives
import numpy as np
array=np.ones(10)*5 print("An
array of 10 fives:")
print(array)

#5 create an array of all even integers from 20 to 35
import numpy as np array=np.arange(20,36,2)
print("Array of all the even integers from 20 to 35")
print(array)
#6. create a 3x3 matrix with values ranging from 0 to 8
import numpy as np x = np.arange(0, 9).reshape(3,3)
print(x)

#7 Concatenate a and b
import numpy as np a =
np.array([1, 2, 3])
print(a)
b = np.array([4, 5, 6])
print(b)

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print('\n---Result of a and b---')
print(np.concatenate((a, b)))
"""Pandas"""
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#8. create a dataframe with 3 rows and 2 columns
import pandas as pd import numpy as np
exam_data = {'name': ['ranjani', 'sneha', 'gayathri', 'ajith', 'rolex',
'cesar', 'joseph', 'santhosh', 'vetri', 'kavi'],
'score': [12.5, 9, 16.5, np.nan, 9, 20, 14.5, np.nan, 8, 19]}
labels = ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j'] df
= pd.DataFrame(exam_data , index=labels) print("First three
rows of the data frame:") print(df.iloc[:3])
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#9.Generate the series of datas from 1st jan ,2023 to 10th feb,2023
import datetime import pandas as pd
test_date = datetime.datetime.strptime("01-01-2023", "%d-%m-%Y") K
= 41
date_generated = pd.date_range(test_date, periods=K)
print(date_generated.strftime("%d-%m-%Y"))
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#10. create 2D list to Dataframe import
pandas as pd
lists=[[1, 'aaa', 22],[2, 'bbb', 25], [3, 'ccc', 24]]
df=pd.DataFrame(lists) print(df)
```