Please address thoroughly the following questions:

Q1: Enter the output of the following code block and describe the action being executed by the code block.

\*Assume the input value is 500, so enter 500 when asked to enter an integer value in the output.

anIntValue=input("Enter an integer value:")

print ("The user has entered this value:", anIntValue)

Q2: In the following code block, there is an error. Please correct the error, enter the correct output, and describe the action being executed by the code block. HINT: I suggest entering the code into your Jupyter Notebook and running the code as Python will let you know the line of the error.

x = 10.5

y = 5

Print("Data type of x: ",type(x),'\n')

print("Data type of y: ",type(y),'\n')

Q3: In the following code block, there is an error. Please correct the error, enter the correct output, and describe the action being executed by the code block.

aDaystring="6/1/2021"

aList=aDayString.split('/')

print(aList)

Q4: In the following code block, there is an error. Please correct the error, enter the correct output, and describe the action being executed by the code block.

list(range(1,21)]

Q5: In the following code block, there is an error. Please correct the error, enter the correct output, and describe the action being executed by the code block.

list(Range(0,-20,-3))

Q6: In the following code block, there is an error. Please correct the error, enter the correct output, and describe the action being executed by the code block.

Import pandas as pd

aList = [5,10,33,14,245]

df = pd.DataFrame(aList)

print(df)

Q7: In the following code block, there is an error. Please correct the error, enter the correct output, and describe the action being executed by the code block.

import pandas as pd

aDict= {"Name":["Sally", "Joe", "Jose", "Susan", "Saanvi"], 'Age':[20,30,40, 25,23], 'Time':[2.0,2.2,2.5,2.55,3]}

df=pd.DataFrame(aDict,index=['1st Place','2nd Place','3rd Place','4th Place', '5th Place'])

print(DF)

Q8: In the following code block, there is an error. Please correct the error, enter the correct output, and describe the action being executed by the code block.

import pandas as pd

aDictOfSeries = {'one':pd.Series([1,2,3,4,5], index=['z','y', 'x','w','v']),

'two':pd.Series([1,2,5,10], index= ['z', 'y', 'w', 't'])}

df=pd.DataFrame(aDictOfSeries)

df['three']=pd.Series([1,20,30], index=['z', 'v','y'])

print(df)

df['four'] = df['one'] + df['five']

print('\n')

print(df)

Q9: In the following code block, there is an error. Please correct the error, enter the correct output, and describe the action being executed by the code block.

import numpy as np

x= np.arange(15).reshape((3,5))

y.sum(axis=0)

Q10: Enter the output of the following code block and describe the action being executed by the code block.

aTuple = ("O'Reily", "Wiley","Google","Azure", "AWS")

aTuple[2]= 'Pearson'

Q11: In the following code block, there is an error. Please correct the error, enter the correct output, and describe the action being executed by the code block.

sampl\_string= "It's a Wonderful Life."

print (sample\_string[2:-4])

Q12: Here is a fun little program. Run the 1st code block and then run the 2nd. Enter both outputs as your answer.

**1st code block (do not enter this line into the command)**

print ("Hello and welcome to my interactive tutorial.")

name = input("What is your name? ")

age = int(input("What is your age? "))

city = input("What city do you reside in? ")

email = input("What is your email? ")

print (f"Thank you very much {name}, you will be contacted at {email}.")

**2nd code block (do not enter this line into the command)**

password = input("Create a password: ")

print ("Welcome to the portal", name)

password\_check = input("Please enter your password: ")

if password\_check == password:

print ("Successful! Welcome back", name)

else:

print("Sorry, no entrance; wrong password")