LISTS

Slicing

a=[1,2,3,4,5,6,7,8,9,10,11,12]

a[1:5]

a[-3]

a[::2]

a[1:8:2] // 2,4,6,8

a[::-1]

a[2:5:3]

Q-1. What Will Be The Output Of The Following Code Snippet?

```
a=[1,2,3,4,5,6,7,8,9]
print(a[::2])
```

A. [1,2]
B. [8,9]
C. [1,3,5,7,9]
D. [1,2,3]

Two ways to create an empty list-

l=list()

l=[]

3)What will a.extend(53) give you where ‘a’ is list, when u print a

a=[1,2,3,4,5]

A] [1,2,3,4,5,53]

B] [53,1,2,3,4,5]

C][1,2,3,4,5]

D]ERROR int object is not iterable

4)Diff between remove() and del

b=[1,2,3,4,5]

del b[:2]

b.remove(2)

5)What will the following output:

numbers=[1,2,3,4,5,6,4,4]

numbers.index(4)

A)4 B)3 C)6 D)7 E)3,6,7

6)output for cheeses = ['Cheddar', 'Edam', 'Gouda']

'Edam' in cheeses

Ans:True

7) t = ['d', 'c', 'e', 'b', 'a']

t.sort()

Ans:

print t

['a', 'b', 'c', 'd', 'e']

8) t = ['a', 'b', 'c', 'd', 'e', 'f']

del t[1:5]

Ans:

print t

['a', 'f']

9)   s = 'pining for the fjords'

t = s.split()

print t

['pining', 'for', 'the', 'fjords']

10) Q-3. What Will Be The Output Of The Following Code Snippet?

```
a=[1,2,3,4,5]
print(a[3:0:-1])
```

A. Syntax error
B. [4, 3, 2]
C. [4, 3]
D. [4, 3, 2, 1]

12) Match the code to the result. One result is a Series, the other a DataFrame

Make a dataframe and ask them the output

1. df[‘Quarter’]
2. df[[‘Quarter’]]

A. Series B. Data Frame

13) Which rows are included in this Boolean index?

Again make a dataframe

df[df[‘Sold’] < 110]

A. 0, 1, 2
B. 1, 2, 3
C. 0, 1
D. 2, 3

14) how do you slice by rows and columns?

```
details.ix[2:4, ['Email','Gender']]
```

15) Series is a one-dimensional labeled array capable of holding any data type.
a) True
b) False

True

```
grades = pd.Series(data = [100,80,100,90,80,70], name = "Grades", dtype='int')

grades
```

16) #creating a dataframe using pandas series datasets by using dictionaries

```
gpa=pd.Series(data=[100,70,80,60,80,40])

names=pd.Series(data=['Apoo','James','Kim','Jake','Ben'])

years=pd.Series(data=['sr','jr','so','gr','fr'])


gpa_dict={'Names':names,'Years':years,'GPA':gpa}

GPA_DF=pd.DataFrame(gpa_dict)
```

GPA_DF

17) how to drop nan values?

```
>>> df

   A    B   C  D

0  NaN  2.0 NaN  0

1  3.0  4.0 NaN  1

2  NaN  NaN NaN  5
```

1)df.dropna(axis=1, how='all') #when all values in a column are na values u drop na

ABD AS OUTPUT

2) df.dropna(axis=1, how='any')#even if one value is a column is na drop it

Only column D as o/p

3) df.dropna(axis=0, how='all')#if all values are na in a row drop it

No drop

```
18) json_data = '[{"GPA":3.0,"Name":"Bob"},{"GPA":3.7,"Name":"Sue"},{"GPA":2.4,"Name":"Tom"}]'

tweets = pd.read_json(json_data, orient='records')
tweets.head()
```

19)difference between list and dictionary.

a)nothing in common

b)dict are sorted and lists are not

c)dict access values using a key and lists use an index

d)access values using an index and lists use a key

20) If my_dict = {"shirts": 5, "pants": 4, "shoes": 2}, what will print my_dict["pants"] print to the console?

a)"pants": 4

b)4
c){"pants": 4, "shoes", 2}
d){4, 2}

21) If my_list = [6, 7, 13, 12], what is my_list[3] % my_list[1] equal to?

a)0b)5c)7d)6

22) What is the difference between pop and remove?

A)pop only works on lists, and remove only works on dictionaries
B)remove only works on lists, and pop only works on

C)POP RETURNS THE VALUE AT THAT INDEX AND REMOVE DOES NOT

D)REMOVE RETURNS THE VALUE AT THAT INDEX AND POP DOES NOT

t = ['a', 'b', 'c']

x = t.pop(1)

X//B

t = ['a', 'b', 'c']

t.remove('b')

print t//['a', 'c']

23) Q: What data type does the range() function generate?

A)INT B)FLOAT C)STRING D)LIST

24) Replace the line so that the function multiplies all values in the list by 3

```
def list_mod(x):
  for i in range(0, len(x)):
    _______________
  return x
```

A) x[i]=x[i]*3
B) n[i]**= 3
C) x[i] = [i] ** 3
D) n[i] = n[i] * 3

25) Of strings, lists, and dictionaries, which can you iterate through using a for loop?

26)

Q: If d = {‘color’: ‘red’, ‘number’: 5}, what is d.items() equal to?

[(color, red), (number, 5)]

[(‘color’, ‘red’), (‘number’, 5)]
[(‘color’, ‘number’), (‘red’, 5)]
[‘color’, ‘number’, ‘red’, 5]

27) : What is the correct syntax for list slicing?

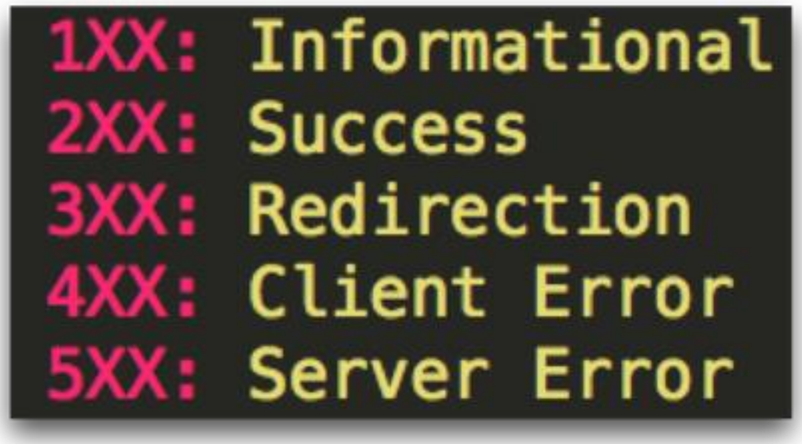
[start:stride:end]
[start:stride]
[start:end:stride]

[stride:start:end]

28) Question: The Python module to consume Web API's is called:

A. api
B. requests
C. http
D. urllibrary

29) Request Verbs
GET
POST
PUT
DELETE
Response
Status Codes



```
1XX: Informational
2XX: Success
3XX: Redirection
4XX: Client Error
5XX: Server Error
```

30)slide 10 url question webapi