303, Database handling using Python
MCQ

1. Which of the following SELECT clause will skips over rows at the beginning of the result set.
a. DISTINCT
b. LIMIT
c. WHERE
d. OFFSET

2. Python Module can include
a. Class
b. Definition
c. Other Modules
d. All of the above

3. A module will be available
a. Globally
b. In current namespace
c. Within Module only
d. Within Program only

4. Python can find modules and packages within
a. Current Folder
b. PYTHONPATH directory
c. Python's Default Path
d. All of the above

5. A Module can also include runnable code
a. True
b. False

6. We can use any python file as module by using

a. Import

b. Implement

c. Require

d. None of the above

7. Runnable statements in module are executed when

a. Module is executed explicitly

b. One time when Module in imported

c. Both a and b is true

d. Both a and b is false

8. Which of the following is correct way of importing module

a. import Module_name

b. form Module_name import Def_1

c. import Module_name as Alias

d. All of the above

9. What PYTHONPATH Environment variable includes

a. List of Directory Paths for Modules

b. Python Executable Path

c. Path for Python Home Directory

d. None of the above

10. What is Namespace?

a. A namespace is a dictionary of variable names and their corresponding objects.

b. A namespace is a dictionary of Modules and their corresponding Paths

c. A namespace is a dictionary of Packages and their corresponding Modules

d. A namespace is a dictionary of Classes and their corresponding objects.

11. A Python statement can access variables in a local namespace and in the global namespace. If a local and a global variable have the same name the _____ variable shadows the _____ variable."

a. Local, Global
b. Global, Local

12. What sqlite3.connect() used for?

a. To create Database
b. To Connect SQLite with Python
c. To open Database and return Active Connection Object
d. All of the Above is correct

13. What is the meaning of : sqlite3.connect("":memory:"")

a. Open SQLite prompt without creating Database
b. Create Database in System Folder
c. Create temporary in-Memory Database
d. Open database in current folder

14. Select correct option with respect to execute() statement

a. It executes multiple DDL as well as DML Commands
b. It executes multiple DDL Commands
c. It executes single DDL or DML Command
d. It executes single DDL Command

15. When we need to use cursor?

a. To execute Select Statement and fetch records
b. To execute Trigger using Python
c. To create Transaction
d. To execute sqlite Dot Commands

16. When we need to use executeScript()?

a. To execute Script
b. To execute multiple statements together
c. To autocommit the executed statements

d. None of the above

17. Which function is used to fetch multiple records?
a. fetchone()
b. fetchall()
c. fetchmany()
d. fetchsome()

18. The open() function returns _____.
a. Open File Pointer
b. File Content
c. Total Length of File
d. Status

19. Which mode is used to open a file in reading mode but also allows to write
a. r
b. rw
c. w+
d. r+

20. Which of the following is used to read the file line by line?
a. read('\n')
b. read(1)
c. readline('/n')
d. readline()

21. CSV File can be read or write using
a. File Module
b. CSV Module
c. SQLite3 Module
d. Data Module

22. What is an import?

a. It is a module

b. It is a function

c. It is a class

d. It is a statement

23. _____ function takes File Pointer and returns CSV Reader Object.

a. reader()

b. writerows()

c. writer()

d. csv_reader()

24. Which of the following is the correct order for import?

a. Compile, find and execute a module

b. Find, Compile and Execute a module

c. Execute, find and compile a module

d. Compile, execute and find a module

25. What DictReader do?

a. Read CSV file and create Tabular Data Object

b. Read CSV file and create Dictionary Object

c. Read CSV file and create Tuple List

d. None of the above

26. By using sqlite3, we can store our data on

a. Local

b. Global

c. Server

d. None of the above

27. Which of the following Python module is used to interact with SQLite?

a. SQLite

b. SQLite3

c. sqlite

d. sqlite3

28. close() function in sqlite3 is used for the:
a. To close the query
b. To close the table
c. To close the database
d. None of the above

29. Which of the following DML statement requires commit while interacting with SQLite through Python?
a. Create Table
b. Select
c. Insert Into
d. All of the above

30. Which of the following is used to import a module into your python program?
a. import
b. from
c. imp.realod
d. all of the above

31. Python's module search path is composed of which of the following
a. The home directory of the program
b. PYTHONPATH directories (if set)",
c. Standard library directories
d. All of the above

32. State True or False. Modules are loaded and run on the first import or from, and only the first.
a. True
b. False

33. Which of the following cursor object's function is used to run the SQL statements from Python script?

a. connect()

b. commit()

c. execute()

d. run()

34. Which of the following is not built-in object type of Python?

a. List

b. Dictionary

c. File

d. Array

35. Which mode you will use while opening a file, if you want to create a file if does not exists and want to remove exiting data if file is already exists?

a. t -truncate

b. a -append

c. r -read

d. w -write

36. Which of the following function reads data from a text file and return a list of rows?

a. reader()

b. DictReader()

c. row()

d. fetchone()

37. Which of the following specifies the character used to surround fields that contain the delimiter character?

a. quotechar

b. delimiter

c. lineterminator

d. escapechar

38. What will you do if your read data contains delimited character as data value?
a. Use a different delimiter
b. Wrap the data in quotes
c. Escape the delimiter characters in the data
d. Any of the above

39. If quoting is set to csv.QUOTE_MINIMAL,
a. then .writerow() will quote fields only if they contain the delimiter or the quotechar.
b. then .writerow() will quote all fields.
c. then .writerow() will quote all fields containing text data and convert all numeric fields to the float data type.
d. then .writerow() will escape delimiters instead of quoting them. In this case, you also must provide a value for the escapechar optional parameter.

40. Which of the following type can have 2-dimentional data?
a. Numpy array
b. List
c. Data Frame
d. All of the above

41. _____ is an open source Python library for highly specialized data analysis.
a. Numpy
b. Pandas
c. Matplotlib
d. None of the above

42. _____ is the object of the pandas library designed to represent one-dimensional data structures.
a. Data Frame
b. List
c. Series

d. Tuple

43. With respect to Series object S what will be the output of S[0:4]?
a. Elements from 0 to 3 will be selected
b. Elements from 1 to 4 will be selected
c. Elements from 0 to 4 will be selected
d. Elements from 1 to 3 will be selected

44. What is NaN?
a. Missing Value
b. Corrupted Value
c. Non-numeric Value
d. Null Value

45. _____ consists of an ordered collection of columns, each of which can contain a value of different type.
a. Series
b. Data Frame
c. Both A and B
d. None of the above

46. Which of the following is not a method of pandas?
a. read_csv
b. read_excel
c. read_sql
d. read_doc

47. Which of the following library in Python is used for plotting graphs and visualization.
a. Pandas
b. NumPy
c. Matplotlib
d. None of the above

48. Which of the following statement is wrong?
a. We can create Series from Dictionary in Python.
b. Keys of dictionary become index of the series.
c. Order of indexes created from Keys may not be in the same order as typed in dictionary.
d. All are correct

49. The data label associated with a particular value of Series is called its
_____.
a. Data value
b. Index
c. Value
d. None of the above

50. What will be syntax for pandas dataframe?
a. pandas.DataFrame(data, index, dtype, copy)
b. pandas.DataFrame(data, index, rows, dtype, copy)
c. pandas_DataFrame(data, index, columns, dtype, copy)
d. pandas.DataFrame(data, index, columns, dtype, copy)

51. Which of the following thing can be data in Pandas?
a. a python dict
b. an ndarray
c. a scalar value
d. All of the above

52. Which of the following statement shows first five rows of Data Frame?
a. DF.head()
b. DF.head(5)
c. Both A and B
d. None of the above

53. The by default indexing is
a. Positional Index

b. Valued Index
c. Labelled Index
d. Sliced Index

54. Which library is the most used visualization library in python?
a. visual
b. matlibplot
c. matplotlib
d. matlab

55. Which function of matplotlib can be used to create a line chart?
a. line
b. plot
c. graph
d. bar

56. Which one of these is not a valid line style in matplotlib?
a. -
b. --
c. -.
d. >

57. Which graph should be used if we want to show distribution of elements?
a. Pie
b. Scatter
c. Bar
d. Histogram

58. Which graph should be used if we want to find patterns in data?
a. Pie
b. Scatter
c. Bar
d. Histogram

59. Which chart is often used to visualize a trend in data over intervals of time?

a. Line

b. Pie

c. Bar

d. Hist

Ans: Line

60. Which of the following data structure have row and column index?

a. list

b. dictionary

c. DataFrame

d. ndarray

61. Which of the following module is used to read a CSV file?

a. csv

b. pandas

c. both csv & pandas

d. none of the above

62. Which of the following parameter indicate the character used to separate values in a CSV file?

a. delimiter

b. escapechar

c. linererminator

d. quotechar

63. Which of the following is a default delimiter for reader() function of csv module?

a. ;

b. :

c. "

d. ,

64. How to read a file when delimiter character is a part of data itself?

a. Use other delimiter

b. Wrap the data in quotes

c. Escape the delimiter character in data

d. Any of the above

65. Which of the following function is used to write a DataFrame object to. CSV file using pandas module?

a. writer()

b. writerow()

c. writeheader()

d. to_csv()

66. Which of the following file mode will create a file if it does not exists?

a. r

b. w

c. c

d. b

67. Which of the following file mode is used to insert data at the end of a file?

a. r

b. w

c. a

d. i

68. Which of the following function is used to read data from a CSV file in the form of python dictionary type?

a. ReadDictionary()

b. ReaderDict()

c. DictReader()

d. DictionaryReader()

69. By default plot() function will plot _____ chart.

a. Histogram

b. Scatter

c. Line

d. Bar

70. Which of the following keyword argument is used to show triangle markers on plot?

a. t

b. o

c. s

d. ^

71. What will be the ouput of following code? Assume that >>> start with new line.
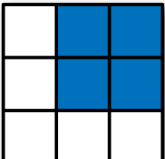
```
>>>arr=np.arange(10)
>>>arr[5:8]
```
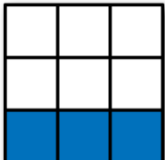
a. 5, 6, 7

b. 6, 7, 8

c. 4, 5, 6

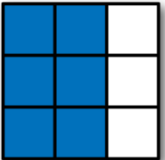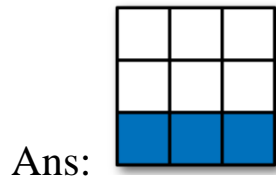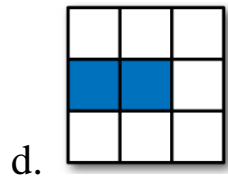d. 5, 6, 7, 8

Ans: 5, 6, 7

72. What will arr[2: , :] will return if arr is a 2D ndarray?

a.

b.

c.

d.

Ans:

73. Which of the following python statement returns 5 random numbers?
a. numpy.random()
b. numpy.random.random()
c. numpy.random.randn(5)
d. numpy.radom.randint(5)

74. If arr is a 2D ndarray, then which of the following statement compute mean across the columns?
a. arr.mean(axis=1)
b. arr.mean(axis=0)
c. arr.mean(0)
d. arr.mean(axis=2)

75. Can we store string values in ndarray?
a. Yes
b. No

76. The expression TRUE AND NULL is _____ in SQLite.
a. True
b. False
c. NULL
d. None of the above

77. If you attempt to store a value with a numeric type (float or integer) into a column with a text affinity,
a. it will be converted into an integer type before being stored

b. it will be converted into an floating type before being stored

c. it will be converted into a text representation before being stored as a text value type

d. it will be stored without any conversion

78. Which of the following trigger can be fired on views rather than on tables?
a. before
b. after
c. instead of
d. All of the above

79. What will happen if you give a column type to a table's column which does not match with any of the SQLite column type then,
a. the column is given the float affinity.
b. the column is assigned the numeric affinity.
c. then the column is given the text affinity.
d. then the column is given the integer affinity.

80. SQLite is a
a. relational database management system
b. database management system
c. structured query language
d. server

81. SQLite is lightweight means
a. have less capabilities.
b. having less setup complexity, administrative overhead and resource usage.
c. size of database is less
d. number of records stored in database tables is less

82. What will be the result of True OR Null in SQLite?
a. True
b. False
c. Null

d. None of the above

83. Which of the SQL Data Language is not supported by SQLite?
a. DDL
b. DML
c. TCL
d. DCL

84. SQLite uses _____ for data type of table's column.
a. dynamic typing technique
b. static column type
c. fixed column type
d. object typing technique

85. How many concrete data types are there in SQLite?
a. 4
b. 5
c. 6
d. 7

86. A column with a text affinity will only store values of which type?
a. NULL
b. Text
c. BLOB
d. All of the above

87. A column with a numeric affinity will store values of which type?
a. NULL, Text and Integer
b. NULL, Text and BLOB
c. Integer, Text and BLOB
d. NULL, Text, BLOB, Integer, and Float

88. If no column type was given, then the column is given the _____ affinity.
a. Text

b. Numeric

c. Ineteger

d. None

89. If a table column is applied a UNIQUE constraint, can that columns contains NULL value for more than one records?

a. Yes

b. No

90. The _____ is a user friendly version of standard table.

a. constraint

b. index

c. view

d. trigger

91. If we drop a view it will also drop a table it references.

a. True

b. False

92. SELECT is a

a. DML command

b. DDL command

c. TCL command

d. DCL command

93. Which of the following command explicitly open a transaction in SQLite?

a. COMMIT

b. OPEN

c. BEGIN

d. SAVEPOINT

94. Can we use a column name without aggregate function in Select header if it is not specified in Group By caluse?

a. Yes

b. No

95. The distinct scan the result set and eliminate any duplicate rows
a. is an expensive operation to perform
b. should be use frequently in queries
c. is a inexpendive operation
d. is not available in SQLite

96. The _____ operator will return one instance of any row that is found in both SELECT blocks.
a. INTERSECT
b. UNION
c. UNION ALL
d. EXCEPT

97. Which trigger is fired for views?
a. before
b. after
c. instead of
d. none

98. In which trigger both NEW and OLD data can be accessed?
a. Insert
b. Update
c. Delete
d. Select

99. Which of the following command is used to dump table structure to a text file?
a. .dump
b. .output
c. .schema
d. .mode

100. To dump data of one or more tables into a file your mode should be set to
_____.

a. csv

b. insert

c. col

d. file

101. The .dump command outputs the SQL statements on screen, to issue the output to a file, you use the _____ command.

a. .dump

b. .output

c. .schema

d. .mode

102. During importing data from CSV file if a table already exists in database then

a. sqlite3 uses all the rows, including the first row as actual data to import

b. sqlite3 uses all the rows, except first row as actual data to import

c. sqlite3 uses all the rows, excluding the last row as actual data to import

d. sqlite3 uses first 100 rows, including the first row as actual data to import

103. Python Module can include

a.   Class

b.   Definition

c.   Other Modules

d.   **All of the above**

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    b. CSV Module
    c. SQLite3 Module
    d. Data Module

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    b. writerows()
    c. writer()
    d. csv_reader()

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    b. Read CSV file and create Dictionary Object
    c. Read CSV file and create Tuple List
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    a. Local
    b. Global
    c. Server
    d. None of the above

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    b. To close the table
    c. To close the database
    d. None of the above

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    a. Numpy array
    b. List
    c. Data Frame
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   b. Pandas
   c. Matplotlib
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   b. List
   c. Series
   d. Tuple
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   c. Non-numeric Value
   d. Null Value
132._____ consists of an ordered collection of columns, each of which can contain a value of different type (numeric, string, Boolean, etc.).
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133. Which of the following is not a method of pandas?
   a. Read_csv
   b. Read_excel
   c. Read_sql
   d. Read_doc
134. Which of the following library in Python is used for plotting graphs and visualization.

a. Pandas
b. NumPy
c. **Matplotlib**
d. None of the above

135. Which of the following statement is wrong?
    a. We can create Series from Dictionary in Python.
    b. Keys of dictionary become index of the series.
    c. Order of indexes created from Keys may not be in the same order as typed in dictionary.
    d. **All are correct**

136. The data label associated with a particular value of Series is called its
    _____
    a. Data value
    b. **Index**
    c. Value
    d. None of the above

137. What will be syntax for pandas dataframe?
    a. pandas.DataFrame(data, index, dtype, copy)
    b. pandas.DataFrame(data, index, rows, dtype, copy)
    c. pandas_DataFrame(data, index, columns, dtype, copy)
    d. **pandas.DataFrame(data, index, columns, dtype, copy)**

138. Which of the following thing can be data in Pandas?
    a. a python dict
    b. an ndarray
    c. a scalar value
    d. **All of the above**

139. Which of the following statement shows first five rows of Data Frame ?
    a. DF.head()
    b. DF.head(5)
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    a. **Positional Index**
    b. Valued Index
    c. Labelled Index

d. Sliced Index

141. Which library is the most used visulization library in python?
    a. visual
    b. matlibplot
    c. matplotlib
    d. matlab

142. Which function of matplotlib can be used to create a line chart?
    a. line
    b. plot
    c. graph
    d. bar

143. which one of these is not a valid line style in matplotlib?
    a. '-'
    b. '--'
    c. '-.'
    d. '<'

144. which graph should be used if we want to show distribution of elements?
    a. Pie
    b. Scatter
    c. Bar
    d. Histogram

145. which graph should be used If we want to find patterns in data?
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    b. Scatter
    c. Bar
    d. Histogram

146. Which chart is often used to visualize a trend in data over intervals of time.
    a. Line
    b. Bar
    c. Pie
    d. Scatter

147. SQLite is
    a. Distributed Database
    b. NoSQL Database

    c. Relational Database
    d. Object Oriented Database

148. Feature of SQLite includes
    a. Serverless
    b. Self-contained
    c. Zero Configuration
    d. All of the above

149. What is type affinity?
    a. Column can store fixed sized data
    b. Column can store any data of any type
    c. Column can store any type of data preferred by its storage class.
    d. Column can store everything in string type

150. Which of the following can be used to comment in SQLite?
    a. A. /* comment */
    b. B. – comment
    c. C. Both A and B
    d. D. None of the above

151. Which of the following is true to open Database in SQLite?
    a. .open <DBname>
    b. .databases <DBName>
    c. open Database <DBName>
    d. None of the above

152. Which of the following is true about the SQL AS clause?
    a. The AS clause in SQL is used to change the column name in the output or assign a name to a derived column.
    b. The SQL AS clause can only be used with the JOIN clause.
    c. The AS clause in SQL is used to defines a search condition.
    d. All of the mentioned