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Python home work

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Multiple Choice Questions

1. A local variable in Python is a variable that is,

a. Defined inside every function

b. Local to the given program

c. Accessible from within the function

d. All of these

2. Which of the following statements are the advantages of using functions?

a. Reduce duplication of code

b. Clarity of code

c. Reuse of code

d. All of these

3. The keyword that is used to define the block of statements in function?

a. function

b. func

c. def

d. pi

4. The characteristics of docstrings are

a. suitable way of using documentation

b. Function should have a docstring

c. Can be accessed by __doc()__

d. All of these

5. The two types of functions used in Python are

a. Built-in and user-defined

b. Custom function and user function

c. User function and system call

d. System function

6. _____ refers to built-in mathematical function.

a. sqrt

b. rhombus

c. add

d. sub

7. The variable defined outside the function is referred as

a. static

b. global

c. automatic

d. register

8. Functions without a return statement do return a value and it is

a. int

b. null

c. None

d. error

9. The data type of the elements in sys.argv?

a. set

b. list

c. tuple

d. string

10. The length of sys.argv is?

a. Total number of arguments excluding the filename

b. Total number of arguments including the filename

c. Only filename

d. Total number of arguments including Python Command Func

11. The syntax of keyword arguments specified in the function header?

a. * followed by an identifier

b. _ followed by an identifier

c. ** followed by an identifier

d. _ _ followed by an identifier

12. The number of arguments that can be passed to a function is

a. 0

b. 1

c. 0 or more

d. 1 or more

13. The library that is used to create, manipulate, format and convert dates, times and timestamps in Python is

a. Arrow

b. Pandas

c. Scipy

d. NumPy

14. The command line arguments is stored in

a. os.argv

b. sys.argv

c. argv

d. None

15. The command that is used to install a third-party module in Python is

a. pip

b. pipe

c. install_module

d. pypy

16. Judge the output of the following code. import math math.sqrt(36)

a. Error

b. −6

c. 6

d. 6.0

17. The function divmod(10,20) is evaluated as

a. (10%20,10//20)

b. (10//20,10%20)

c. (10//20,10*20)

d. (10/20,10%20)

18. Predict the output of the following code?

```
def tweet():
        print("Python Programming!")
tweet()
```

a. Python Programming!

b. Indentation Error

c. Syntax Error

d. Name Error

19. The output of the following code is

```
def displaymessage(message, times = 1):
        print(message * times)
displaymessage("Data")
displaymessage("Science", 5)
```

a. Data Science Science Science Science Science

b. Data Science 5

c. DataDataDataDataDataScience

d. DataDataDataDataDataData

20. Guess the output of the following code

```
def quad(x):
        return x * x * x * x
x = quad(3)
        print(x)
```

a. 27

b. 9

c. 3

d. 81

21. The output of the following code is

```
def add(*args):
x = 0
 for i in args:
            x += i
            return x
 print(add(1, 2, 3))
print(add(1, 2, 3, 4, 5))
```

a. 16 15

b. 6 15

c. 1 2 3

d. 1 2 3 45

22. Gauge the output of the following code.

```
            def foo():
                        ret urn total + 1
            total = 0
            p r i nt(foo()
```

a. 1

b. 0

c. 11

d. 00

23. The default arguments specified in the function header is an

a. Identifier followed by an = and the default value

b. Identifier followed by the default value within back-ticks

c. Identifier followed by the default value within []

d. Identifier followed by an #.

Review Questions

1. Define function. What are the advantages of using a function?

2. Differentiate between user-defined function and built-in functions.

3. Explain with syntax how to create a user-defined functions and how to call the user-defined function from the main function

. 4. Explain the built-in functions with examples in Python.

5. Differentiate between local and global variables with suitable examples.

6. Explain the advantages of *args and **kwargs with examples.

7. Demonstrate how functions return multiple values with an example

. 8. Explain the utility of docstrings?

9. Write a program using functions to perform the arithmetic operations.

10. Write a program to find the largest of three numbers using functions.

11. Write a Python program using functions to find the value of nPr and nCr .

12. Write a Python function named area that finds the area of a pentagon.

13. Write a program using functions to display Pascal's triangle.

14. Write a program using functions to print harmonic progression series and its sum till N terms.

15. Write a program using functions to do the following tasks:

a. Convert milliseconds to hours, minutes and seconds.

b. Compute a sales commission, given the sales amount and the commission rate

c. Convert Celsius to Fahrenheit.

d. Compute the monthly payment, given the loan amount, number of years and the annual interest rate.