



Ministry of Higher Education

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**The fifth (5) chapter home work of python**

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1. The arithmetic operator that cannot be used with strings is

- a. +
- b. \*
- c. -
- d. All of these

2. Judge the output of the following code,

```
print(r"\nWelcome")
```

- a. New line and welcome
- b. \nWelcome
- c. The letter r and then welcome
- d. Error

3. What is the output of the following code snippet?

```
print("Sunday".find("day"))
```

- a. 6
- b. 5
- c. 3
- d. 1

4. The output of the following code is,

```
print("apple is a fruit".split("is"))
```

- a. ['is a fruit']
- b. [fruit]
- c. ['apple', 'a fruit']
- d. ['apple']

5. For the given string `s = "nostradamus"`, which of the following statement is used to retrieve the character `t`?

- a. `s[3]`
- b. `s.getitem(3)`
- c. `s.__getitem__(3)`
- d. `s.getItem(3)`

6. The output of the following:

```
print("\tapple".lstrip())
```

- a. \tapple
- b. apple""
- c. apple
- d. ""\tapple

7. Deduce the output of the following code:

```
print('hello' 'newline')
```

- a. Hello
- b. hellonewline
- c. Error
- d. Newline

```
"tweet"[2:]
```

9. What is the output of the following code?

a. Apple

10. Identify the output of the following code:

a. My name is Charles Darwin

- 11.** The prefix that is used to create a Unicode string is

- 12.** The function that is used to find the length of the string is

13. What is the output of the following code?

```
print("%s" %string[4:7])
```

- 14.** For the statement given below

The output for the expression `example.strip()` is

- a. \t\ntweet\n
- b. \t\ntweet
- c. tweet\n
- d. 'tweet'

15. Deduce the output of the following code:

```
print('Data Science'.istitle())
```

- a. True
- b. False
- c. Error
- d. None

16. Predict the output of the following code:

```
print('200.123'.isnumeric())
```

- a. True
- b. False
- c. Error
- d. None

### Review Questions

1. What is the use of the *len()* function? Give one example.
2. With the help of an example, explain how we can create string variables in Python.
3. What is slice operation? Explain with an example.
4. List all the escape characters in Python with examples.
5. Explain *in* operator with an example.
6. Write a short note on the format operator.
7. Differentiate between the following.
  - a. *isidentifier()* and *isnumeric()*
  - b. *find()* and *casefold()*
  - c. *split()* and *splitlines()*
8. What would happen if a mischievous user typed in a word when you ask for a number?
9. Write a function called *rotate\_word* that takes a string and an integer as parameters, and that function should return a new string containing the letters from the original string “rotated” by the given amount. For example, “cheer” rotated by 7 is “jolly” and “melon” rotated by -10 is “cubed”.
10. Given that *message* is a string, what does *message[:]* indicate?
11. Write a function that takes a string as an argument and displays the letters backward, one per line.
12. Write a Python program to access the last character of the string with the help of *len()* function.
13. Ask the user for a string, and then for a number. Print out that string, that many times. (For example if the string is Python and the number is 3 you should print out PythonPythonPython.)
14. Write a program that reads the date in the format (dd/mm/yyyy) and replaces the ‘/’ with a ‘-’ and displays the date in (dd-mm-yyyy) format.
15. Write a function that finds the number of occurrences of a specified character in a string.
16. Write a program that parses a binary number to a decimal integer. For example, 11001 ( $1 * 2^4 + 1 * 2^3 + 0 * 2^2 + 0 * 2^1 + 1 * 2^0$ ).
17. Consider the following four string variables, as shown:

```
city1 = "London"
city2 = "Paris"
city3 = "London"
city4 = "Sydney"
```

What are the results of the following expressions?
  - a. *city1 == city2*
  - b. *city3.count('n')*
  - c. *city1 <= city4*
  - d. *city2.upper()*

e. `len(city4)`

f. `city1.lower()`

18. Write a program that accepts a string from the user and display the same string after removing vowels from it.

19. Write a function to insert a string in the middle of the string.

20. Write a program to sort a string lexicographically.

21. Write a program to replace a string with another string without using built-in methods.

22. Write a program to concatenate two strings into another string without using the `+` operator.

23. Write a program to strip a set of characters from a string.

24. Write a program to extract the first  $n$  characters of a string.