Name : Mohammad Akrami

F name : Jumma

Class : ISE 1

Title: chepter 5 questions

The Questions.

1. The arithmetic operator that cannot be used with string is?
   Answer. C. -
2. Judge the output of the following code .
   Print(r"/n Welcome ")
   The correct answer; b. \n Welcome
3. What is the output of the following code .
   Print("Sunday.find("day"))
   The correct answer. C. 3
4. The output of the following code.
   Print('apple is a fruit".split("is"))
   The correct answer. C. ['people','a fruit']
5. For the given strings = "Nostradamus",which of the following statement is used to retrieve the character t ?
   Answer. A. s[3]
6. The output of the following code .
   Print("\tapple".lstrip())
   The correct answer: c. apple
7. Deduce the output of the following code.
   Print('hello".'newline')

The correct answer. B. hellownewline

8. What is the output of the following code.
   "tweet"[2:]
   The correct answer. C. eet
9. What is the output of the following of code.
   "apple is a fruit "[7:10]
   The correct answer. B. sa
10. Identify the output of the following code.
    Print("My name is %s"%('Charles Darwin'))
    The correct answer. A. my name is Charles Drawin
11. The prefix that i15. s used to create a Unicode string is.
    The correct answer. A. u
12. The function that is used to find the length of the string is.
    The correct answer. A. len(string)
13. What is the output of the following code.
    String = "Lion is the king of jungle "
    Print("%z"%string[4:7]
    The correct answer. D. is
14. For the statement given bellow.
    Example="\t\ntweet\n"
    The output for the expression example.strip() is.
    The correct answer. D. 'tweet'
15. Deduce the output of the following code.
    Print("date science ".istitle())
    The correct answer.a. True
16. Predict the output of the following code:
    Print("200.123".isnumeric())
    The correct answer. B. False

Review Questions.

1. What is the use of the len() function? Give an example.
   Answer . len() function return the number of items in an object .
   Example.
   S = "helo"
   Print(len(s))
   Output = 5
2. With the help of an example ,Explain how we can create string variables in python.

Answer.
Name = “Ali”
String variable

3. What is the slice operation ?explain with an example.
   Answer . Slice operation extract part of a string.
   S = “python”
   Print(s[1:4])
   Output = yth
4. List all the escape characters in python with an example.
   Answer. Escape chaaracters
   a. \n => newline
   b. \t => tab
   c. \\ => backslash
   d. \’ => singe Qute
      Example.
      Print(“Line\nLine2”)
5. Explain in operator with an example.
   Answer. In operator check for membership.
   “py” in “python”
   Putput = True
6. Write a short note on the format operator.
   Answer.
   Name = “ali”
   Print(“Hello, %s!” %name)
   Output = Hello Ali
7. Differentiate between the following .
   a. Isidentifier() and isnumeric(): checks if string is valid variable name

   b. Find() and casefold() if all characters are numbers
   c. Split() and splitlines()
8. What would happen if an mischeievious user typed in a word when you ask a number?
   Answer. If a mischeievous user types a word instead of a number and the program expects a number it will cause a runtime error :
   Value Error : invalid
   Literal for int() with base 10
   Use **try_expect** to catch the error
   Try:
   Num =
   Int (input (“Enter a number :”))
   Expect value Error :
   Print(“That was not a valid 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 orginal string “ratated” by the given amount . for example , “cheer” rotated by 7 is “jolly” and “melon” rotaed by -10 is “cubed”.
   Answer.
   Def rotate_word(word ,shift):
   Result = ‘ ‘
   For char in word :
   Char.isapha():
   Base
   = ord (‘A’) if
   Char.isupper() else
   Ord(‘a’)
   Rotated =
   (ord(char) – base +
   Shift) % 26 + base
   Result
   Examples.
   Print(rotate word (“cheer “, 7))
   Output
   Jolly
   Print(rotate word(“melon “, -10))
   Output
   cubed
10. Given that message is a string ,what does message[:] indicate?
    Answer.
    Message[:] return the last characters of the string message.
    Example.
    Message = ‘hello”
    Print(message[;])
    Output
    0
11. Write a function that takes a string as an argument and display the letters backward,one per line.
    Answer.
    Def print_backward(s):
    S[::-1]:
    Print(char)
    Print_backward(“helo”)
12. Write a python program to access the last characters of the string with the helpe of len() function.

Answer.

```
S  = input("Enter a string :")
Print("last character is :", s[len(s)-1])
```

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 the python and the number is 3 you should print out python python python).

    Amswer.

```
Text = input("enter a string:")
Num = int(input("Enter a number :"))
Print(text*num)
```

14. Write a program that reads the date in the format(dd/mm/yyyy) and replace the "/" with a '_' and displays the date in (dd-mm-yyyy) forma.

    Answer.

```
Date = input("Enter date (dd/mm/yyyy):")
New_date =
Date.replace('/','-')
Print("formatted date:",new_date)
```

15. Write a function that finds the number of occurrences of a specified character in a string.

    Answer.

```
Def count_char(s,ch);
        Returns .count(ch)
Print(count_char("hello world","l"))
```

    Output

    3

16. Write a program that parses a binary number to decimal integer . for example , 11001(1*2^4 + 2^3+0*2^2+0*2^1+1*2^0).

    Answer.

```
Binary = input("Enter binary number:")
Decimal = input(binary,2)
Print("decimal:",decimal)
```

17. Consider the following four string variables as shown.

```
City1 = "London"
City2= "Paris"
City3 = "London"
City4 = "Sydney"
```

    What are the result of the following expression?

    a. City1 == city2
    b. City3.count('n')
    c. City <= city4
    d. City2.upper()

e. Len(city4)
f. City.lower

Answer.

Print(city1 == city2)

False

Print(city3.count('n')

2

Print(city1 < city4)

True ("London " <

"seydney ")

Print(city2.upper ())

"PARIS"

Print(len(city4))

6

Print(city1,lower())

"London"

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

Answer.

```
Def remove_vowels(s):
        Vowels = "aeiouAEIOU"
        Return ' ' .join([ch for ch in s if ch not  in vowels])
S = input("Enter a string:")
Print(remove_vowels(s))
```

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

Answer.

```
Def insert_middle(base,insert);
        Mid = len(base) //
2
        Return base[mid]
Insert + base[mid:]
Print(insert_middle("python","123"))
```

Output

Py123ton

20. Write a program to sort a string lexicographically .

Answer.

```
Def sort_string(s):
        Return
' ' .join(sorted(s))
Print(sort_string("banana"))
```

Output

aaabnn

21. Write a program to replace a string with another string without using built_in functions.

    Answer.

```
Def mnnaual_replace(s,old,new):
        Result = “
        I=0
        While I <len(s):
        If
S[i:i+len(cold)] == old:
New
                I  +=
Len(old)
                Else:
S[i]
                I   +=
        Return result
Print(manual_replace(“hello world “, “world”,”python”))
```

22. Write s program to contcatenate two string into another string without using the operators .
23. Write a program to strip a set of characters from string .

    Answer.

```
Def strip_chars(s,chars):
        “return”.join([c for in s if c not in chars])
Print(step_chars(“hello world “, “!ld”))
```

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

    Answer.

```
Def first_n_chars(s,n)
        Return s[:n]
Print(first_n_chars(“programming”,5))
```

    Output

    progr