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# Quizzes

## 06/11/2018 – After the 1st session

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| **#** | **Question** | **Answer** |
| 1 | Using IDLE is mandatory for writing Python programs – Yes/No ? | No |
| 2 | Python only runs on Windows – True/False? | False |
| 3 | X = 1 , is this a valid declaration in Python ? | yes |
| 4 | Is it possible to learn Python without using the Interactive Shell ? | yes |
| 5 | Learning Python automatically ensures that you know data sciences | no |
| 6 | myNum = 1  myNum = myNum + myNum + myNum + myNum  Is this valid ? | yes |
| 7 | Given a string, do you need to write code from scratch to convert it to say uppercase, lowercase ? | no |
| 8 | If you had to join/concatenate two strings, what would you do ? | + |
| 9 | Somebody gives you a Python program and the name of the file is **“wqeqwewqe.txt – what would be your reaction ?** | Py ext. with a proper name |
| 10 | A colleague has created a Python program  >>>>>>>>>>> Program has three lines only  X = 1  Y = 1  Z = 1  Do you think that it is complete ?. What are the possible lines that you can add to the program ? | Print + arithmetic functions |
| 11 | Another colleague has created a Python program  >>>>>>>>>>> Program has the following lines only  Print (1)  Print (2)  Print (3)  Print (4)  Print (5)  Print (6)  Print (7)  Print (8)  Print (9)  Print (10)  Print (11)  It works, but what would you advise your colleague to do ? | Loops to simplify the code |
| 12 | Yet another colleague has created a Python program  >>>>>>>>>>> Program has the following lines only  Uououooou = “test”  Dfgfdgdfg = ‘dddd’  myNum = “20”  Print (Uououooou + Dfgfdgdfg + myNum )  It works, but what would be your immediate reaction apart from requesting that person to take up an alternate profession ? | Variable names need to be defined properly  Code comments |
| 13 | "***Alphabetic-Chairs"***.upper().lower().upper().lower().upper()  Will the above work ? | In Python statements like this simplify coding |
| 14 | Can you declare a string and assign multi line text to it ? | yes |
| 15 | Does Python support multi line comments ? | Yes in a way |

Status – Completed

## 10/11/2018 – After the 2nd session

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| **#** | **Question** | **Answer** |
| 1 | You need to iterate through a list of 10 elements.  Which loop would you use – For loop or While loop ? | FOR loop |
| 2 | There are 50 students in a class.  What kind of loop would you use to print the names of all these 50 students ? | For loop |
| 3 | Does Python treat a String as a sequence of values ? | Yes |
| 4 | Is it possible to use a loop to iterate over the values of a String ? | Yes |
| 5 | Give a quick way of generating numbers from 1 to 20 using a Python built in | RANGE |
| 6 | How does Python identify a block of code ? |  |
| 7 | Will this code work ?  X = 1  If X=1:  X=X+1 | No – there is no indentation |
| 8 | Is it possible to slice a string in Python ?  (Extract just a portion of it) | Yes |
| 9 | In Python, is iteration from start to end or can it be done in the reverse direction as well ?. | Yes |
| 10 | What do you think is wrong with this code snippet  #This is the start of the program  X= 1  If Y= 1:  X= X+ 1  Print (“Value of X is”, X) | Y is not declared |
| 11 | I have a string whose value is “Eats Shoots and Leaves”.  How would I print each character of the above string ? | For loop |
| 12 | Do you think that Python lets you generate random numbers ? | Yes |
| 13 | Do you think that this works ?  # # Chaining Comparison Operators  i = 5;    ans = 1 < i < 10  print(ans) | Yes |
| 14 | Python’s special Slice Operator, what does it let you do ?  >>  It is a way to get items from lists |  |
| 15 | What is the output of the following program :   |  | | --- | | i = 0  while i < 3:         print i         i++         print i+1  >>  ANS : 0 2 1 3 2 4 | |  |
|  |  |  |

## 14/11/2018 –

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| **#** | **Question** | **Answer** |
| 1 |  |  |

# CLASS ROOM EXERCISES

## 06/11/2018 – ROUND 001

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| **#** | **Assignment Group** | **Assignment** | **Hints** | **D.O.D**  **(S – Simple**  **M – Medium**  **C - Complex)** | **Status** |
| 1 | PY-CL-ASSIGN-ROUND1 | Declare a string variable  Convert this string to uppercase |  |  | Completed |
| 2 | PY-CL-ASSIGN-ROUND1 | Declare a string variable  Convert this string to lowercase |  |  | Completed |
| 3 | PY-CL-ASSIGN-ROUND1 | Declare 5 integer variables. Print the average of these five numbers |  |  | Completed |
| 4 | PY-CL-ASSIGN-ROUND1 | Given a number, use an available function from the standard library to always print the number as a positive value |  |  | Completed |
| 5 | PY-CL-ASSIGN-ROUND1 | Write a program to print the value and type of integer, string and float variables |  |  | Completed |
| 6 | PY-CL-ASSIGN-ROUND1 | Modify the above program to include the following at the end  **del** <var1> <var2> <var3>  print the values again . What happens ? |  |  | Completed |
| 7 | PY-CL-ASSIGN-ROUND1 | Write a program to either print “Number is greater than zero “ or “less than zero” depending upon its value |  |  | Completed |
| 8 | PY-CL-ASSIGN-ROUND1 | Write a program to calculate the maximum of three numbers |  |  | Completed |
| 9 | PY-CL-ASSIGN-ROUND1 | Given two strings, print <A> is included in <B> if <B> contains <A>  ( “fully” is contained in “fully-loaded-pizza” ) |  |  | Completed |

## ROUND - 002

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| **#** | **Assignment Group** | **Assignment** | **Hints** | **D.O.D**  **(S – Simple**  **M – Medium**  **C - Complex)** | **Status** |
| 1 | PY-CL-ASSIGN-ROUND2 | Find the number of occurrences of a word in a sentence |  |  |  |
| 2 | PY-CL-ASSIGN-ROUND2 | Find the number of occurrences of a character in a word or in each word of a sentence or in a total sentence |  |  |  |
| 3 | PY-CL-ASSIGN-ROUND2 | Create a program that will play the “cows and bulls” game with the user.  Say the number generated by the computer is 1038. An example interaction could look like this:  Welcome to the Cows and Bulls Game!  Enter a number:  >>> 1234  2 cows, 0 bulls  >>> 1256  1 cow, 1 bull |  |  |  |
| 4 | PY-CL-ASSIGN-ROUND2 | Write a program that accepts a sentence and calculates the number of upper case letters and lower case letters. |  |  |  |
| 5 | PY-CL-ASSIGN-ROUND2 | Write a program that first accepts the following values from the user –   1. Character to print 2. Number of iterations   It then prints  A + AA + AAA + AAAA |  |  |  |
| 6 | PY-CL-ASSIGN-ROUND2 | **“ \* “**  **“\* \* \*“**  **“\* \* \* \* \*“**  **“\* \* \* \* \* \* \* “**  **“\* \* \* \* \* \* \* \* \* “** |  |  |  |
| 7 | PY-CL-ASSIGN-ROUND2 | **\* \* \* \* \* \* \* \* \* \* \* \* \* \* \*** |  |  |  |
| 8 | PY-CL-ASSIGN-ROUND2 | \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* |  |  |  |
| 9 | PY-CL-ASSIGN-ROUND2 | \*  \*\*  \*\*\*  \*\*  \* |  |  |  |
| 10 |  | Given the string ‘ABC’, print all permutations of it using for loops |  |  |  |

## ROUND - 003

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| **#** | **Assignment Group** | **Assignment** | **Hints** | **D.O.D**  **(S – Simple**  **M – Medium**  **C - Complex)** | **Status** |
| 1 | PY-CL-ASSIGN-ROUND3 | Consider the following list  superVillians = [“Joker”, “The Riddler”, “Penguin”, “Mad Hatter”, “Thanos”, “GoldFinger”]  Replace “The Riddler”, “Penguin” and “Mad Hatter”in the list with “Dr. Dang” |  |  |  |
| 2 | PY-CL-ASSIGN-ROUND3 | Write a program which first creates and empty list  Keep accepting input from the user. Every time the user enters a value, extend the list and print  Use CTRL + C to exit |  |  |  |
| 3 |  | Consider the following list  awfulDishes = [“Karela curry”, “methi bhajji”, “palak bhajji”, “packaged masala oats”]  Write a program to delete “palak bhajji” and “packaged masala oats” from the list |  |  |  |
| 4 |  | Using a WHILE Loop print the elements of a list that has any 10 elements |  |  |  |
| 5 |  | Consider the following list –  [ [1,1], [2,3], [4,5], [7,8]]  Assume that this nested list contains length and breadth of rectangles  Build a dictionary containing the following elements  Part 1 - {1:1, 2:6, 3:20, 4:56}  Part 2 – {1:[1, 4], 2:[6,10], 3:[20,18], 4:[56,30]} |  |  |  |
| 6 |  | Consider the following dictionary  {1:”aeiou”, 2:”x”, 3:”x”, 4 : “fleabag”, 5:”shotto”, 100:”shebanggg”, 201:”@#” }  Delete all elements for which the value is “x” |  |  |  |
| 7 |  |  |  |  |  |