

Unit 8 - Week 6: Cool Ideas (Part 4)

Register for Certification exam

Course outline

Pre-Requisite Assignment

Week 1: Introduction

Week 2: Introduction to Python

Week 3: Cool Ideas (Part 1)

Week 4: Cool Ideas (Part 2)

Week 5

Week 6: Cool Ideas (Part 4)

- ☐ Substitution Cipher - The science of secrecy
- ☐ Substitution Cipher - The science of secrecy 01
- ☐ Substitution Cipher - The science of secrecy 02
- ☐ Substitution Cipher - The science of secrecy 03
- ☐ Tic Tac Toe - Down the memory Lane
- ☐ Tic Tac Toe - Down the memory Lane 01
- ☐ Tic Tac Toe - Down the memory Lane 02
- ☐ Tic Tac Toe - Down the memory Lane 03
- ☐ Tic Tac Toe - Down the memory Lane 04
- ☐ Tic Tac Toe - Down the memory Lane 05
- ☐ Recursion
- ☐ Recursion 01
- ☐ Recursion 02
- ☐ Recursion 03
- ☐ Recursion 04
- ☐ Recursion 05
- ☐ Recursion 06

Quiz : Assignment 6

- ☐ Programming Assignment-1: Computing Paradox
- ☐ Programming Assignment-2: Dictionary
- ☐ Programming Assignment-3: Functions
- ☐ Week 6 Feedback

Week 7: Cool Ideas(Part 5)

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TEXT TRANSCRIPTION

Thank you for taking the Assignment 6.

Assignment 6

Your last recorded submission was on 2019-09-11, 20:18 IST

Due date: 2019-09-11, 23:59 IST.

1) What is the output of the following program?

```
x = "abcdef"
i = "a"
while i in x:
    print(i, end = " ")
```

- ☐ i i ...infinite times
- ☐ a b c d e f ...infinite times
- ☐ a b c d e f
- ☒ a a a a a...infinite times

1 point

2) Which of the following arithmetic operators can be used with strings?

- ☐ ++
- ☐ _
- ☒ +
- ☐ None of the above

1 point

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

```
line = "What will have so will"
L = line.split('a')
for i in L:
    print(i, end=' ')
    ☐
    ["What", 'will', 'have', 'so', 'will']
    ☒ Wh t will h ve so will
    ☐ What will have so will
    ☐ [Wh', 't will h', 've so will']
```

1 point

4) Fill in the code to complete the following function for computing factorial:

```
def factorial(n):
    if n == 0:
        return 1
    else:
        return .....
    ☐ factorial(n-1)*n
    ☐ n*(n-1)
    ☐ n*factorial(n-1)
    ☒ Either A or C
```

1 point

5) A palindrome is a word, number, phrase, or other sequence of characters which reads the same backward as forward. Fill in the code to complete the following function for checking whether a string is a palindrome.

```
def isPalindrome(s):
    if len(s) != 1:
        return True
    elif s[0] != s[-1]:
        return False
    else:
        return isPalindrome(s.substring(1, len(s) - 1))
    ☒ s[0] != s[-1]:
    ☐ s[0] != s[len(s)]:
    ☐ s[1] != s[len(s)-1]:
    ☐ s[1] != s[len(s)]:
```

1 point

6) What is the output of the following recursive function?

```
def test(i,j):
    if(i==0):
        return j
    else:
        return test(i-1,i+j)
print(test(4,7))
☒ 17
☐ 7
☐ 13
☐ 10
```

1 point

7) What is the game strategy used in the Tic Tac Toe game?

- ☐ Divide and Conquer
- ☒ Min-Max Strategy
- ☐ Greedy Strategy
- ☐ None of the above

1 point

8) What does the following function do?

```
def fun(n):
    if (n == 0 or n == 1):
        return n
    if (n%3 != 0):
        return 0
    return fun(n/3)
☐ It returns 1 when n is a multiple of 3, otherwise returns 0
☒ It returns 1 when n is a power of 3, otherwise returns 0
☐ It returns 0 when n is a multiple of 3, otherwise returns 1
☐ It returns 0 when n is a power of 3, otherwise returns 1
```

1 point

9) Which of the following statements is correct regarding recursion and iteration?

- ☐ The code size in case of recursion is smaller than that of iteration
- ☐ The time taken for execution of program in case of recursion is more than that of iteration
- ☐ Iteration is terminated through base case and recursion is terminated when the iterator condition is not satisfied
- ☒ Both A and B

1 point

10) If COMPUTER is denoted as KPDITWQC and SCIENCE is denoted as YKHQLKQ, how is SET denoted by this encoding scheme?

- ☒ YQW
- ☐ RAVP
- ☐ OXS
- ☐ FML

1 point

You may submit any number of times before the due date. The final submission will be considered for grading.

Submit Answers

