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Course outline

Week 6 : Assignment 1

The due date for submitting this assignment has passed.

Due on 2023-03-08, 23:59 IST.

Assignment submitted on 2023-03-01, 15:55 IST

1) Which of the following is true about recursion?　　　　　　　　　　　　　　**1 point**

☐ Recursion always performs better than non-recursive code.

☑ Recursive code can be reused.

☑ The base case is necessary for recursion.

☑ Recursive code can be shorter than non-recursive code

Yes, the answer is correct.
Score: 1

Accepted Answers:
Recursive code can be reused.
The base case is necessary for recursion.
Recursive code can be shorter than non-recursive code

2) If PYTHON is encoded by TCXLSR then DIAMOND will be encoded as?　　　　**1 point**

◯ EJBNPOE

◯ FKCORPF

◯ HMERTSH

◉ HMEQSRH

Yes, the answer is correct.
Score: 1

Accepted Answers:
HMEQSRH

3) Let L be a list containing different names of movies. Which statement is correct to select　**1 point**
a random movie name from that list L?

◉ random.choices(L)

◯ random.select(L)

◯ random.movie(L)

○ random.random(L)

Yes, the answer is correct.
Score: 1

Accepted Answers:
random.choices(L)

4) In the list L = [4,6,7,4,6,2,1], What is the index of element '7'?   *1 point*

○ 0

○ 1

◉ 2

○ 3

Yes, the answer is correct.
Score: 1

Accepted Answers:
2

5) What will be the output of the following code?   *1 point*

```
import string

def shift(word,value):

    letters = string.ascii_lowercase
    new = ''

    for i in range(len(word)):

        if word[i] in letters:

            index = letters.index(word[i])
            new = new + letters[(index+value)%26]

        else:

            new = new + word[i]

    return new
```

◉ Shift every letter in a given word by value.

○ Shift every letter in a given word by 1.

○ Shift every letter in a given word by 26.

○ Returns the same word.

Yes, the answer is correct.
Score: 1

Accepted Answers:
Shift every letter in a given word by value.

6) Library used to import images?   *1 point*

◉ PIL

○ Imageview

○ IMG

○ image

Yes, the answer is correct.
Score: 1

Accepted Answers:
PIL

7) Values of CSV files are separated by?   *1 point*

◉ Commas

○ Colons

○ Semi-colons

○ Slash

Yes, the answer is correct.
Score: 1

Accepted Answers:
Commas

8) what will be the output of the following program?   *1 point*

```
1    def recursive(num):
2
3        if(num==1):
4            print('*')
5            return
6
7        if(num%2 == 0):
8            print('*'*num)
9            recursive(num-1)
10           return
11       else:
12           recursive(num-1)
13           return
14
15   recursive(10)
```

○ **********
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○ *********
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○ Runs into infinite loop

◉ **********
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Week 10 ()

Week 11 ()

Week 12 ()

Text Transcripts ()

Download Videos ()

Books ()

Live Session ()

Problem Solving Session ()

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Yes, the answer is correct.
Score: 1
Accepted Answers:
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9) What will happen if we don't check for a base case in recursion.   *1 point*

    ◯ The program will run smoothly

    ◯ The program will return a wrong output.

    ◉ The program will enter into an infinite loop.

    ◯ The program will never run.

Yes, the answer is correct.
Score: 1

Accepted Answers:
The program will enter into an infinite loop.

10) Which of the following is true about recursion?   *1 point*

    ◯ Recursion increases the speed of the program.

    ◉ Recursion decreases the speed of the program.

    ◯ Speed of the program remains the same.

    ◯ Recursion is easier to understand than non-recursive programs.

Yes, the answer is correct.
Score: 1

Accepted Answers:
Recursion decreases the speed of the program.