The due date for submitting this assignment has passed. Due on 2019-08-28, 23:59 IST. As per our records you have not submitted this assignment.

All questions carry equal weightage. All Python code is assumed to be executed using Python3. You may submit as many times as you like within the deadline. Your final submission will be graded. Note:

- If the question asks about a value of type string, remember to enclose your answer in single or double quotes.
- If the question asks about a value of type list, remember to enclose your answer in square brackets and use commas to separate list items.

1) Consider the following Python function.

```python
def mystery(l):
    if l == []:
        return (l)
    else:
        return (l[-1:] + mystery(l[:-1]))
```

What does `mystery([31,32,71,18,51])` return?

No, the answer is incorrect.
Score: 0
Feedback:
*Elements are moved from the end of the list to the beginning, so the list gets reversed.*
Accepted Answers:
* (Type: Regex Match) 
  *[[[]*51]*,[]*18,*[],]*71],[],*32[,]*31]*]/*
2) What is the value of pairs after the following assignment?

```python
pairs = [(x, y) for x in range(3, 0, -1) for y in range(2, 0, -1) if (x + y) % 3 == 0]
```

No, the answer is incorrect.
Score: 0
Feedback:
All pairs (i,j) with i ∈ {3,2,1}, j ∈ {2,1} such that i + j is a multiple of 3.

Accepted Answers:
(Type: Regex Match) \[ \[(i, j) \mid i \in \{3, 2, 1\}, j \in \{2, 1\}, i + j \mod 3 == 0 \] \]

3) Consider the following dictionary.

```python
marks = {"Quizzes": {"Mahesh": [3, 5, 7, 8], "Suresh": [9, 4, 8, 8], "Uma": [9, 9, 7, 6]}, "Exams": {"Mahesh": [37], "Uma": [36]}}
```

Which of the following statements does not generate an error?

- marks["Exams"]["Suresh"] = [44]
- marks["Exams"]["Suresh"].append(44)
- marks["Exams"]["Suresh"] = [44]
- marks["Exams"]["Suresh"].extend([44])

No, the answer is incorrect.
Score: 0
Feedback:
Direct assignment to a new key adds a value. All other updates result in `KeyError`.

Accepted Answers:
marks["Exams"]["Suresh"] = [44]

4) Assume that d has been initialized as an empty dictionary:

```python
d = {}
```

Which of the following generates an error?

- d[12] = 5
- d["1,2"] = 5
- d[(1,2)] = 5
- d[[1,2]] = 5

No, the answer is incorrect.
Score: 0
Feedback:
Key must be an immutable value. List is not OK. Tuple, string and integer are OK.

Accepted Answers:
d[[1,2]] = 5
Online Programming Test 1, 26 Sep 2019, 09:30-11:30

Online Programming Test 2, 26 Sep 2019, 20:00-22:00