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Course outline

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Thank you for taking the Week 2: Assignment 2.

Week 2: Assignment 2

Your last recorded submission was on 2022-02-09, 17:12 IST

Due date: 2022-02-09, 23:59 IST.

1) Consider a variable job = "chemist". Which of the following expressions will retrieve the last character from the variable value? 1 point

- ☐ job[7]
☒ job[len(job) - 1]
☐ job[5:6]
☒ job[-1]
☐ All of the above statements are true

2) Which of the following expressions should be used to assign the variable get_num to get the final print statement output as value 75 from the below tuple? 1 point

```
nst_tup = ("System", (60, 75, 45), (15, 3, 12))  
get_num =  
print(get_num)
```

- ☐ nst_tup[1][2]
☐ nst_tup[1.2][1]
☒ nst_tup[1][1]
☐ nst_tup[1.2][1]

3) What would be the output for the following set of statements?

1 point

```
new_list = [13, 23, 18, 64, 51]  
new_list[4] = True  
print(new_list)
```

- ☐ [13, 23, 18, 64, 51, "True"]
☒ [13, 23, 18, 64, True]
☐ [13, 23, 18, 64, 51, True]
☐ Index Error

4) What result does the final statement print?

1 point

```
scores = (12, 25, 32, 39, 44)  
f_score, *bw_s, l_score = scores  
print("Output is :", f_score, "and", bw_s, "and", l_score)
```

- ☐ Output is: 12, (25, 32, 39), 44
☐ Output is: 12 and (25, 32, 39) and 44
☐ Output is: 12 and 25 and 39
☐ ValueError: Too many values to unpack
☒ Output is: 12 and [25, 32, 39] and 44

5) When the following set of instructions are executed, how many times does the vowel "e" appear in the result?

1 point

```
word = "occurrence"
for ltr in range(len(word)):
    if ltr % 3 == 0:
        print(word[ltr])
```

- ☐ 1
- ☐ "e" is not printed
- ☒ 2
- ☐ 4
- ☐ None of the above

6) Which of the following options, when executed, will result in a tuple?

1 point

- ☒ t = (2,2)
- ☐ y = ['h', '4', '3']
- ☒ r = ('v',)
- ☐ s = ('w')
- ☐ All except b

7) Which statement/ statements will result in an empty datastructure?

1 point

- ☐ dict1 = {}
- ☐ tup1 = ()
- ☐ st1 = set()
- ☐

```
toy = "baseball"
gt_str = toy[2:2]
print("Output:", gt_str)
```

- ☒ All of the above

8) Consider a dictionary city created with the following keys and values.

1 point

```
city = {'Delhi':3, 'Bengaluru':5, 'Chennai':4, 'Kolkata':6, 'Mumbai':7}
```

Through which all possible way / ways can we access the value 5 from the dictionary city?

- ☒ city['Bengaluru']
- ☐ city.get('Bengaluru')
- ☐ city.values()[1]
- ☒ list(city.values())[1]
- ☐ None of the above

9) Count the number of elements in the below list.

1 point

```
list_tens = [["October", 24, ["2021"]]]
```

- ☐ 2
- ☒ 1
- ☐ 3
- ☐ 0
- ☐ None of the above

10) A datastructure is defined as celebrate = set('Nativity Day'). What are the possible outputs if celebrate is printed?

1 point

1. {'v', 'N', 't', 'i', 'y', 'a', 'D'}
2. {'v', 'N', 't', 'i', 'y', 'a', 'D', ' '}
3. {'v', 'N', 't', 'i', 'y', 'a', 'D', ''}
4. {'v', 't', 'i', 'y', 'a', 'D', ' ', 'N'}

- ☐ 1
- ☐ 1 and 3
- ☐ 1,2,3
- ☐ 3 and 4
- ☒ All are correct



In [1]: *# Consider a variable job = "chemist". Which of the following expressions will
retrieve the last character from the variable value?*

```
job = "chemist"
```

In [2]: job[7]

```
-----
IndexError                                Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_5592\38642040.py in <module>
----> 1 job[7]

IndexError: string index out of range
```

In [3]: job[len(job) - 1]

Out[3]: 't'

In [4]: job[5:6]

Out[4]: 's'

In [5]: job[- 1]

Out[5]: 't'



In [6]: *# Which of the following expressions should be used to assign the variable get_num
to get the final print statement output as value 75 from the below tuple?*

```
nst_tup = ("System", (60, 75, 45), (15, 3, 12))
get_num = nst_tup[1][1]
print(get_num)
```

75

In [7]: *# What would be the output for the following set of statements?*

```
new_list = [13, 23, 18, 64, 51]
new_list[4] = True
print(new_list)
```

[13, 23, 18, 64, True]

In [8]: *# What result does the final statement print?*

```
scores = (12, 25, 32, 39, 44)
f_score, bw_s, l_score = scores
print("Output is :", f_score, "and", bw_s, "and", l_score)
```

Output is : 12 and [25, 32, 39] and 44



In [9]: *# When the following set of instructions are executed, how many times does the vowel "e" appear in the result?*

```
word = "occurrence"
for ltr in range(len(word)):
    if ltr % 3 == 0:
        print(word[ltr])
```

```
o
u
e
e
```

In [10]: *# Which of the following options, when executed, will result in a tuple?*

```
t = (2,2)
y = ['h','4','3']
r = ('v',)
s = ('w')
```

In [11]: `type(t)`

Out[11]: tuple

In [12]: `type(y)`

Out[12]: list

In [13]: `type(r)`

Out[13]: tuple

In [14]: `type(s)`

Out[14]: str



In [15]: *# Which statement/ statements will result in an empty datastructure?*

```
dict1 = {}
print(dict1)

tup1 = ()
print(tup1)

st1 = set()
print(st1)

toy = "baseball"
gt_str = toy[2:2]
print("output:",gt_str)

{}
()
set()
output:
```



```
In [16]: # Consider a dictionary city created with the following keys and values.
# Through which all possible way / ways can we access the value 5 from the dictionary city?

city = {'Delhi':3, 'Bengaluru':5, 'Chennai':4, 'Kolkata':6, 'Mumbai':7 }
```

```
In [17]: city['Bengaluru']
```

```
Out[17]: 5
```

```
In [18]: city.get['Bengaluru']
```

```
-----
TypeError                                 Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_5592\2161206439.py in <module>
----> 1 city.get['Bengaluru']

TypeError: 'builtin_function_or_method' object is not subscriptable
```

```
In [19]: city.values()[1]
```

```
-----
TypeError                                 Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_5592\1294878199.py in <module>
----> 1 city.values()[1]

TypeError: 'dict_values' object is not subscriptable
```

```
In [20]: list(city.values())[1]
```

```
Out[20]: 5
```



```
TypeError: 'builtin_function_or_method' object is not subscriptable
```

```
In [19]: city.values()[1]
```

```
-----
TypeError                                 Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_5592\1294878199.py in <module>
----> 1 city.values()[1]

TypeError: 'dict_values' object is not subscriptable
```

```
In [20]: list(city.values())[1]
```

```
Out[20]: 5
```

```
In [21]: # Count the number of elements in the below list.
```

```
list_tens = [["October", 24, ["2021"]]]
len(list_tens)
```

```
Out[21]: 1
```

```
In [ ]:
```