Quiz 04

Due Oct 4 at 10pm **Points** 10 **Questions** 5 **Time Limit** None

Instructions

Answer the following questions in your own words. Do NOT simply cut and paste the information from the slides or any other source. You will receive a score of 0 if you copy the prose from the source.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	39 minutes	10 out of 10

Score for this quiz: **10** out of 10
Submitted Oct 3 at 10:54pm
This attempt took 39 minutes.

Question 1 — 2 / 2 pts

What is the value of **list(range(5, 15, 3))**?

- [5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 3]
- [5, 6, 7, 8, 9, 10, 11, 12, 13, 14]
- [5, 8, 11, 14] — Correct!
- [5, 10, 15]

Question 2 — 2 / 2 pts

What values are printed by the following code?

```
for i in range(6):
    if i == 5:
        break
    elif i == 2:
        continue
    print(i)

print('done')
```

- 0, 1, 2, 3, 4, done
- 0, 1, 3, 4, done

Correct!

- 0, 1, 2, 3, 4, 5, done
- 1, 2, 3, done

Question 3

2 / 2 pts

What's wrong with this code segment? Please fix it to print

5
3
1
done

```
#####
## buggy code ##
n = 5

while n != 0:
     print(n)
     i -= 2

print('done')
```

Your Answer:

This code will be leading to an infinite loop because the value of n is not being decreased anywhere and it will keep on printing the value of n which is 5. What we can do in order to rectify the same is we need to change the line (i -=2) with n -=2 and the value of n will be decreased

but then still it will be going in an infinite loop because the value of n will be getting decreased from 5 -> 3 -> 1 -> -1 and so. We can stop this by changing the loop condition to while n>0.

Rectified Code:

```
n = 5
while n > 0:
    print(n)
    n -= 2
print("done")
```

```
n = 5

while n > 0:
    print(n)
    n -= 2

print('done')
```

Question 4

2 / 2 pts

What is the output from the following code segment?

```
for i in range(0,4,2):
    for j in range(2):
        print(i, j)
```

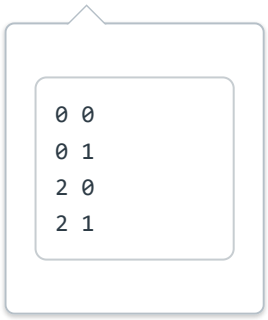
Your Answer:

0 0

0 1

2 0

2 1



Question 5

2 / 2 pts

Describe the characteristics of situations when generators are a good solution?

Your Answer:

- Generators are useful when we want to maintain the state of the application and state will be changed only until anything relevant is yielded.
- Generators are useful when we need to use asynchronous functions.
- Any situation where we need to read multiple lines from a file.

Example: let's assume we have a situation where we need to maintain a list of tweets by Joe Biden, but there is this situation where we have no idea when he is gonna tweet next, we use a generator and store all tweets in a list, yield could be anything like clicking the tweet button. Here we will be needing the Async environment as well in order to run the program.

Quiz Score: **10** out of 10