COMP110

Revisiting Commonly Missed Quiz Concepts

Announcements

Re: Assignments:

- **EX07: Linked List Utility Functions** due tomorrow
    - Want help? Please visit:
        - **Office Hours:** 11am–5pm today and tomorrow (in SN008)
        - **Tutoring:** 5-7pm today (in SN011)
        - (no OH or Tutoring Wednesday–Sunday)

Quiz 00

```python
"""Some functions!"""

def perimeter(length: float, width: float) -> float:
    """A curious function."""
    return 2 * length + 2 * width
    return length * width + 4

def square_perimeter(side: float) -> float:
    """Another curious function."""
    print("Calculating...")
    return perimeter(length=side, width=side)

print(square_perimeter(side=4.0))
```

What line(s) would be unreachable in this code listing? Why?

Quiz 01

Which operator has the highest precedence, meaning it will be evaluated first, in an expression with the following operators?

○ or

○ >

○ and

○ not

Logical / Boolean Operators

Expression	Evaluation
False **or** False	**False**
True **or** False	**True**
False **or** True	**True**
True **or** True	**True**

Expression	Evaluation
False **and** False	**False**
True **and** False	**False**
False **and** True	**False**
True **and** True	**True**

Expression	Evaluation
not False	**True**
not True	**False**

Precedence (highest to lowest):

0. Arithmetic operators (PEMDAS)
1. Relational Operators
2. Not
3. And
4. Or

Quiz 02

```
1  roster: dict[int,str] = {4: "Davis", 22: "Lubin", 30: "Mayo", 110: "Rameses"}
2  final_four: set[int] = {2016, 2017, 2022}
3  chant: list[str] = ["U", "N", "C"]
```

What will be printed?

```
for c in chant:
  print(f"{c}!")
```

. What will be printed?

```
def say(uni: list[str]) -> str:
  letters: str = ""
  for char in uni:
    letters += char
  return letters

print(say(chant))
```

Quiz 02

Consider the following code listing:

```
1  animals: list[str] = ["fox", "bear", "rabbit"]
2  ints: list[int] = [1, 1, 1, 1]
3  two_d: list[list[int]] = [[10, 20], [30, 40], [50, 60]]
```

Write an expression that accesses the list [50, 60] stored in the two_d variable.

Quiz 02

Consider the following code listing:

```
1  animals: list[str] = ["fox", "bear", "rabbit"]
2  ints: list[int] = [1, 1, 1, 1]
3  two_d: list[list[int]] = [[10, 20], [30, 40], [50, 60]]
```

Write an expression that accesses the value 40 stored in the two_d variable.

Consider the following code listing:

Quiz 02

```
1  animals: list[str] = ["fox", "bear", "rabbit"]
2  ints: list[int] = [1, 1, 1, 1]
3  two_d: list[list[int]] = [[10, 20], [30, 40], [50, 60]]
```

Write a sequence of 3 assignment statements that will swap the values of the 0 and 1 index in **animals**. You will need to declare and initialize a temporary variable.

Quiz 03

```python
class Pet:
    name: str
    age: int

    def __init__(self, n: str, a: int):
        self.name = n
        self.age = a

class Person:
    name: str
    pets: list[Pet]

    def __init__(self, n: str, pets: list[Pet]):
        self.name = n
        self.pets = pets

    def adopt(self, new_pet: Pet) -> None:
        print(f"{self.name} adopted {new_pet.name}!")
        self.pets.append(new_pet)

farah: Person = Person(n = "Farah", pets = [])
ella: Pet = Pet("Ella", 1)
farah.adopt(ella)
```