Mock Test info:

4 multiple choices

3 trace the expression

2 Short answers EG: implement a function, compiler vs interpreter

1 long answer: Writing a function and using it for something else

1. Consider the following document in the vim editor:

|  |
| --- |
| print(Hello, Wrld!")❚  ~  ~  ~  ~ |

… where ❚ is your cursor location. Assuming vim is in INSERT MODE, what key sequence can a user efficiently use to navigate and correct the print error WITHOUT using the arrow keys:

1. Esc, K, K, K, K, K, I, O
2. I, L, L, L, L, L, Esc, O
3. N, J, J, J, J, J, I, O
4. Esc, H, H, H, H, H, I, O
5. N, H, H, H, H, H, I, O

Answer: D

2. Consider the following program:

|  |
| --- |
| x = 16  y = 8  z = x / y  print(type(z)) |

What will this program output in the console?

1. class:int
2. <class 'int'>
3. class:float
4. <class 'float'>
5. 2
6. “2”
7. “x / y”
8. “16 / 8”
9. Nothing: the code contains an error

Answer: D

3. Consider the following program:

|  |
| --- |
| midterm\_grades = [80, 70, 90]  final\_exam\_grades = [60, 90, 90]  print(midterm\_grades[1:2] + final\_exam\_grades[1:2]) |

What will this program output in the console?

1. 80, 70
2. [80, 70]
3. 160
4. [160]
5. 70, 90
6. [70, 90]
7. Nothing: the code contains an error.

ANSWER: F

4. Of the fo

#Write a function trapezoid\_area(big\_base: float, small\_base: float, height: float) -> float that calculates the area of a trapezoid given its bases and its height. The area of a triangle can be calculated using the formula: area = 1/2 x (big\_base + small\_base) x height.

#For example, if the base is 10.0 and the height is 5.0, the output should be 25.0 because the area of the triangle is 0.5 \* 10 \* 5.

def trapezoid\_area(base: float, height: float) -> float:

return 0.5 \*

BONUS:

What Linux distro do programmers use to flex on other programmers?

ANSWER: Arch Linux (BONUS WORTH 1 mark)