# Practice Python Exam

NOTE: The exam next week is scheduled for 50 minutes. The time limit is a part of the challenge for scaling purposes. The end result will be scaled. So, if the average mark in the class is say 35% that is a C result.

NOTE 2: The exam is scheduled in the second session of our double. If you are in line 2 Cyber Security we can either attempt to do it in line 2 or you can schedule to do it in any of my teaching lines between Monday and Wednesday. I am happy to get you excused from a different class.

Scores calculation:

1 point questions:

| 0 points | 1 point |
| --- | --- |
| Answer was not submitted or was not able to be assessed | Answer is given and meet expectations for knowledge or understanding on the topic |

2 point questions:

| 0 | 1 | 2 |
| --- | --- | --- |
| Answer was not submitted or was not able to be assessed | Answer is given but does not meet expectations for knowledge or understanding on the topic | Answer is given and meet expectations for knowledge or understanding on the topic |

4 point questions:

| 0 | 1 | 2 | 3 | 4 |
| --- | --- | --- | --- | --- |
| Answer was not submitted or was not able to be assessed | Answer was incomplete and showed a limited understanding of the topic space (1 or 2 of 5 (simple) bugs found) | The answer submitted was a partial response however it showed a growing understanding of the topic space (>2 bugs found ) | The answer submitted was a partial response but answered the majority of the question (>=4 bugs found) | Answer submitted is complete (>=5 bugs found) |

## Scope of questions

* Variables and conditions
* Functions
* Iteration
* Files

There may be some legacy questions about lists, but they will not be advanced, too tricky, or the main point of the question.

### MC: What is the result of the following code? (1 mark)

a = (8-3)/(5\*\*2/4)  
print(f"{a}")

1. 0.8
2. 7.97
3. “5/2.5”
4. 2

### MC: Consider the following code block and select the most accurate answer (1 mark)

def hit(attacker, defender, weapon, damage=1):  
 return f"{attacker.title()} hit {defender.title()} with a {weapon} for {damage} points of damage"  
  
print(hit("ada", 'bob', 'sword', 8))  
print(hit("charles", 'erin', 'mace', 4))  
print(hit("fred", 'georgia', 'sharp stick'))

1. The code will output the following text:  
   > Ada hit Bob with a sword for 8 points of damage  
   > Charles hit Erin with a mace for 4 points of damage  
   > Fred hit Georgia with a sharp stick for 1 points of damage
2. The code will output the following text:  
   > ada hit bob with a sword for 8 points of damage  
   > charles hit erin with a mace for 4 points of damage  
   > fred hit georgia with a sharp stick for 1 points of damage
3. This code will not work as intended because lines 4 and 5 have integers and they should be strings
4. This code will not compile because line 6 does not have a damage

### Short Answer: What is the likely output of the following code and why? (2 marks)

j = 1  
c = j  
while c > 0:  
 print("\*" \* c)  
 if c == 5:   
 j = 0 - 1  
 c+= j

1. This is clearly the work of witchcraft
2. This will likely have an exception due to the print("\*" \* c) being nonsense
3. This code attempts to create a triangle that is 9 high and 5 across but it is broken by the while condition
4. This code attempts to create a triangle that is 9 high and 5 across and is successful

### Long answer: There are at least 5 errors in the following code. (4 marks)

with open("dates", 'w') in month\_file:  
 for month in month\_file:  
 month = month.rstrip()  
 if month == "February":  
 days = 29  
 elif month == "April'  
 or month == "June"   
 or month == "September"   
 or month == "November";  
 days = 30  
 else:  
 days == 31  
 printf("There are {days} days in {month}")

answer1:   
  
  
answer2:   
  
  
answer3:  
  
  
answer4:  
  
  
  
answer5: