Study Guide for CSCI125 Midterm II

The exam will have two parts: written part and programming part. In the written part of exam, no computers are allowed. You may bring notes on 3x5 index card (both sides). Please remember that the exam will test you on concepts not facts.

**Topic covered:**

* Python List(slice, remove item, append item, insert item, in)
* Python Function( define a function)
* If elif else statement.
* For loop and range function. While loop.

**How to review:** Please check in-class exercise, and lecture notes.

**Sample Questions:**

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| 1. What is the output?   >>> keycode = ["1424", "3425","3324", "5567"]  >>> newcode = "1111"  >>> keycode.append(newcode)  >>> keycode[2:2]=[“2121”]  >>> keycode[:3]    2. Complete the function definition so it returns the square of the product of the parameters, so sqrProd(2, 5) returns (2\*5)\*(2\*5) = 100.  def sqrProd(x, y):  3. Define a function that append a new item to a list.  def addNew(task, list):  4. What is printed by the Python code?  def func(x):  return x - 1  print(func(3) \* func(5))  5. What is printed by the Python code?  for i in range(1,7):  print(i)  6 .What is printed by the Python code  n = 3  for x in [2, 5, 8]:  n = n + x  print(n) | 7.What is the output?  speed = 84  if speed <75 and speed > 0:  print(“No ticket”)  elif speed <84:  print(“25 dollars”)  else:  print(“50 dollars”)  8. Write a python loop that calculate  9. What is printed out?  x = 0  while x< 5:  if x <=2:  print(“usca”)  else:  print(“usc”)  x=x+1  10. Write a python program that find maximum between two numbers using if else.    11. (**Programming**) Write a Python program that calculate average of test scores in a given list. And it will display student’s letter grade based on the following grading scale.  90-100 A, 87-89 B+  80-86 B, 75-79 C+  68-74 C, 65-67 D+  60-64 D, 0-59 F  **def lettergrade(scorelist):** |