Write your name ONLY on this cover page.

Turn off cell phones, pagers, and anything that makes a noise.

Nothing is allowed on the desk top but the test, pens, pencils, erasers, and drinks.

Do not ask a question in a way that gives away the answer to the test question.

In any code that you write on this test, you do not have to write comments or print statements that explain what the program does. Just write enough code to do what is asked.

If the code requires import statements, you must write the import statement.

1. Write a code segment that creates a window that is 300 pixels wide and 400 pixels tall and then draws a rectangle with one corner at location (50, 30) and its diagonally opposite at location (150, 200). The user should then be prompted (from the Python shell) to strike any key to close the window. Assume the graphics package has been imported with the directive from graphics import *
2. Append to the following segment of code additional lines that:
   - Will prompt the user (in the shell) for the number of mouse clicks to expect from the user. Assume it will be an integer greater than 1.
   - Upon receiving the first click from the user the program will draw a point at the location where the user clicked.
   - Upon receiving additional clicks from the user the program will draw a line from the location where the user clicked previously clicked to the latest location where the user clicked. This continues until the number of mouse clicks specified in the user input have been received. When the drawing is done the user should see a collection of connected line segments in the window.
   - Upon receiving one additional mouse click the window will close.

```python
from graphics import *
from math import *
def main():
    win = GraphWin("CSCI220", 400, 200)
```

3. Write a program that computes the fuel efficiency of a multi-leg journey. The program will first prompt for the starting odometer reading and then get information about a series of legs. For each leg, the user enters the current odometer reading and the amount of gas used (separated by a space). You can assume that there will be $n$ legs (supplied by the user). The program should print out the miles per gallon achieved on each leg and the total MPG for the trip AFTER all of the information has been entered.
4. Write a program that accepts a string representing a person’s first, middle and last name and returns their corresponding Edisto email address all in lower case. For example, Jane Elizabeth Monferdini should return “jemonferdi@edisto.cofc.edu”. The email address is the first initial of the person’s first name, the first initial of the middle name, and the first 8 characters of the last name followed by the at sign and “edisto.cofc.edu”.

5. Assuming the assignment statement:

```python
text = “Sue, Bill, and Bob”
```

What is the value of x in each of the following?

a. `x = text.find(“,”)`
   x = __________________________

b. `x = text.split(“,”)`
   x = __________________________

c. `y = text.split(“ ”)`
   `x = len(y[0])`
   x = __________________________

d. `x = chr(ord(text[0]))`
   x = __________________________

e. `x = text[0:4]`
   x = __________________________

   x = __________________________
6. Show the string that would result from:
(a) “Looks like {1} and {0} for breakfast”.format(“eggs”, “spam”)

(b) “Hello {1}”.format(“Susan”, “Computewell”)

(c) “{1:0.2f} {0:0.2f}”.format(2.3, 2.3468)

(d) “[{1:3}]”.format(“14”)