

Vendor: Microsoft

Exam Code:98-381

Exam Name:Introduction to Programming Using

Python

Version: Demo

QUESTION 1

You develop a Python application for your company.

You want to add notes to your code so other team members will understand it.

What should you do?

- A. Place the notes after the # sign on any line
- B. Place the notes after the last line of code separated by a blank line
- C. Place the notes before the first line of code separated by a blank line
- D. Place the notes inside of parentheses on any time

Correct Answer: A

References: http://www.pythonforbeginners.com/comments/comments-in-python

QUESTION 2

HOTSPOT

You create a function to calculate the power of a number by using Python.

You need to ensure that the function is documented with comments.

You create the following code. Line numbers are included for reference only.

```
01 # The calc_power function calculates exponents
02 # x is the base
03 # y is the exponent
04 # The value of x raised to the y power is returned
05 def calc_power(x, y):
06    comment = "#Return the value"
07    return x**y # raise x to the y power
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

	Yes	No
Lines 01 through 04 will be ignored for syntax checking.	0	0
The pound sign (#) is optional for lines 02 and 03.	0	0
The string in line 06 will be interpreted as a comment.	0	0
Line 07 contains an inline comment.	\odot	0

Correct Answer:

Answer Area		
	Yes	No
Lines 01 through 04 will be ignored for syntax checking.	0	0
The pound sign (#) is optional for lines 02 and 03.	0	0
The string in line 06 will be interpreted as a comment.	0	0
Line 07 contains an inline comment.	\odot	0

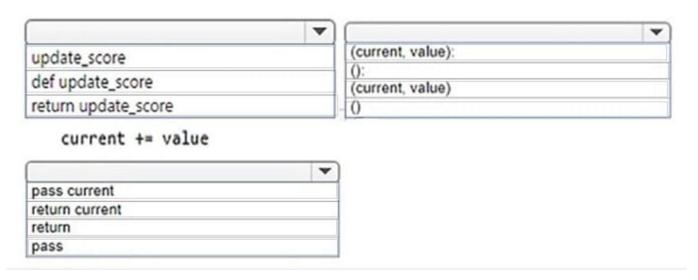
QUESTION 3

HOTSPOT

You are developing a Python application for an online game.

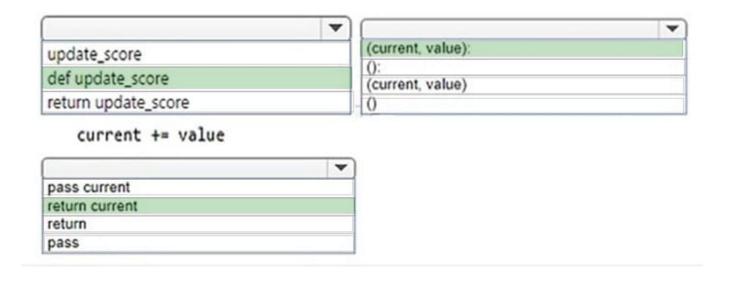
You need to create a function that meets the following criteria: The function is named update_score The function receives the current score and a value The function adds the value to the current score The function returns the new score

How should you complete the code? To answer, select the appropriate code segments in the answer area.



Correct Answer:

Answer Area



QUESTION 4

DRAG DROP

You are writing a Python program that evaluates an arithmetic formula.

The formula is described as b equals a multiplied by negative one, then raised to the second power, where a is the value that will be input and b is the result.

You create the following code segment. Line numbers are included for reference only.

```
01 a = eval(input"Enter a number for the equation: "))
02 b =
```

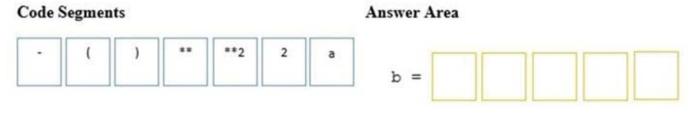
You need to ensure that the result is correct.

How should you complete the code on line 02? To answer, drag the appropriate code segment to the correct location. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or

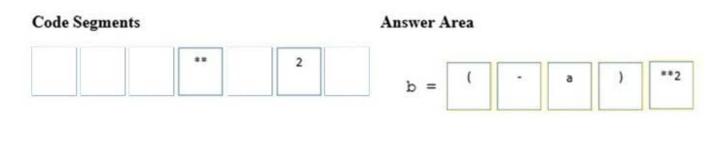
scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:



Correct Answer:



QUESTION 5

You are writing a Python program to automate inventory. Your first task is to read a file of inventory transactions. The file contains sales from the previous day, including the item id, price, and quantity. The following shows a sample of data from the file:

10, 200, 5 20, 100, 1

The code must meet the following requirements: Each line of the file must be read and printed If a blank line is encountered, it must be ignored When all lines have been read, the file must be closed

You create the following code. Line numbers are included for reference only.

```
01 inventory = open("inventory.txt", 'r')
02 eof = False
03 while eof == False:
       line = inventory.readline()
04
05
06
           print(line)
07
80
09
         print ("End of file")
         eof = True
10
11
         inventory.close()
```

Which code should you write for line 05 and line 06?

```
if line != '\n':
A. 05
          if line != "":
   06
        if line != '\n':
B. 05
          if line != None:
   06
C. 05
        if line != '':
          if line != "":
   06
D. 05
       if line != '':
          if line != "\n":
   06
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: A

https://www.dotnetperls.com/readline-python

QUESTION 6

HOTSPOT

The ABC Video company needs a way to determine the cost that a customer will pay for renting a DVD. The cost is dependent on the time of day the DVD is returned. However, there are also special rates on Thursdays and Sundays. The fee

structure is shown in the following list:

The cost is \$1.59 per night.

If the DVD is returned after 8 PM, the customer will be charged an extra day.

If the video is rented on a Sunday, the customer gets 30% off for as long as they keep the video.

If the video is rented on a Thursday, the customer gets 50% off for as long as they keep the video.

You need to write code to meet the requirements.

How should you complete the code? To answer, select the appropriate code segments in the answer area.

```
Video, DVD Rental Calculator
# ABC
ontime = input("Was video returned before 8 pm? y or n").lower()
days_rented = int(input("How many days was video rented?"))
day_rented = input("What day was the video rented?").capitalize()
cost_per_day = 1.59
if ontime
             != "n":
             == "n":
             == "y":
    days rented +-1
if day_rented
                 == "Sunday ":
                >= "Sunday ":
                is " Sunday ":
    total = (days_rented * cost_per_day) * .7
 elif day_rented
                      == "Thursday":
                       <= "Thursday":
                      is "Thursday":
     total = (days rented * cost per day) * .5
  else:
     total = days rented * cost per day
  print("Cost of the DVD rental is: $", total)
```

Correct Answer:

```
Video, DVD Rental Calculator
# ABC
ontime = input("Was video returned before 8 pm? y or n").lower()
days_rented = int(input("How many days was video rented?"))
day_rented = input("What day was the video rented?").capitalize()
cost_per_day = 1.59
if ontime
             != "n":
             == "n":
             == "y":
    days rented +-1
if day_rented
                 == "Sunday ":
                >= "Sunday ":
                is " Sunday ":
    total = (days_rented * cost_per_day) * .7
 elif day_rented
                      == "Thursday":
                       <= "Thursday":
                      is "Thursday":
     total = (days rented * cost per day) * .5
  else:
     total = days rented * cost per day
  print("Cost of the DVD rental is: $", total)
```

QUESTION 7

The ABC company is creating a program that allows customers to log the number of miles biked. The program will send messages based on how many miles the customer logs. You create the following Python code. Line numbers are included for reference only.

```
name = input("What is your name? ")
name = input("What is your name? ")
neturn name

calories = miles * calories_per_mile
neturn calories

distance = int(input("How many miles did you bike this week? "))
burn_rate = 50
biker = get_name()
calories_burned = calc_calories(distance, burn_rate)
print(biker, ", you burned about" ,calories_burned, "calories.")
```

You need to define the two required functions.

Which code segments should you use for line 01 and line 04? Each correct answer presents part of the solution? (Choose two.)

A. 01 def get_name():

B. 01 def get_name(biker):

C. 01 def get_name(name):

D. 04 def calc calories():

E. 04 def calc_calories(miles, burn_rate):

F. 04 def calc_calories(miles, calories_per_mile):

Correct Answer: AF

References: https://www.w3resource.com/python/python-user-defined-functions.php

QUESTION 8

Evaluate the following Python arithmetic expression:

```
(3*(1+2)**2 - (2**2)*3)
```

What is the result?
A. 3
B. 13
C. 15
D. 69

Correct Answer: C

References: http://www.mathcs.emory.edu/~valerie/courses/fall10/155/resources/op_precedence.html

QUESTION 9

DRAG DROP

You are writing a Python program. The program collects customer data and stores it in a database.

The program handles a wide variety of data.

You need to ensure that the program handles the data correctly so that it can be stored in the database correctly.

Match the data type to the code segment. To answer, drag the appropriate data type from the column on the left to its code segment on the right. Each data type may be used once, more than once, or not at all.

Select and Place:

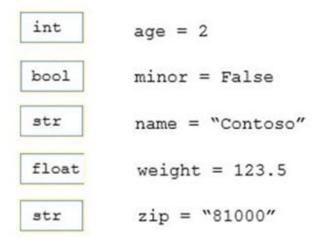
Operations Answer Area bool float int str age = 2 minor = False name = "Contoso" weight = 123.5 zip = "81000"

Correct Answer:

Operations

Answer Area





References: https://www.w3resource.com/python/python-data-type.php

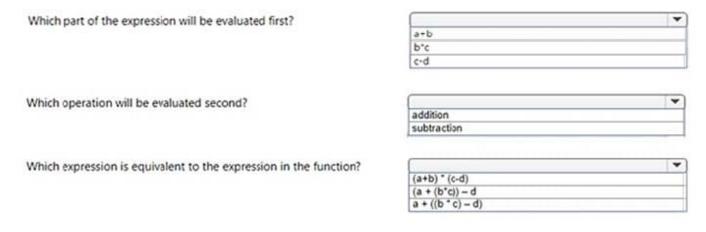
QUESTION 10

HOTSPOT

You develop a Python application for your company.

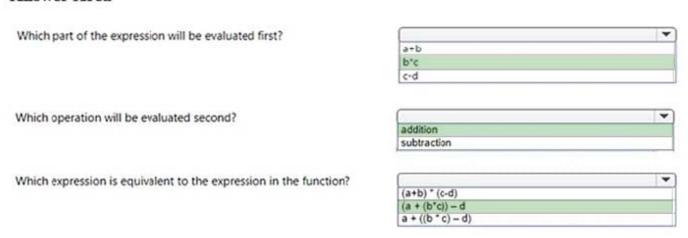
You have the following code. Line numbers are included for reference only.

Use the drop-down menus to select the answer choice that answers each question based on the information presented in the code segment.



Correct Answer:

Answer Area



QUESTION 11

DRAG DROP

You are creating a Python script to evaluate input and check for upper and lower case.

Which four code segments should you use to develop the solution? To answer, move the appropriate code segment from the list of code segments to the answer area and arrange them in the correct order.

Select and Place:

Code Segments

Answer Area

```
else:
   print(name, "is mixed case.")

else:
   print(name, "is lower case.")

name = input("Enter your name: ")

else:
   print(name, "is upper case.")

elif name.upper() = = name:
   print(name, "is all upper case.")

if name.lower() == name:
   print(name, "is all lower case.")
```

Correct Answer:

Code Segments

Answer Area

```
else:
    print(name, "is lower case.")

else:
    print(name, "is lower case.")

else:
    print(name, "is upper case.")

else:
    print(name, "is mixed case.")

elif name.upper() == name:
    print(name, "is mixed case.")
```

References: https://www.w3resource.com/python/python-while-loop.php

QUESTION 12

HOTSPOT

You are designing a decision structure to convert a student\\'s numeric grade to a letter grade. The program must assign a letter grade as specified in the following table:

Percentage range	range Letter grade		
90 through 100	A		
80 through 89	В		
70 through 79	С		
65 through 69	D		
0 through 64	F		

For example, if the user enters a 90, the output should be, "Your letter grade is A". Likewise, if a user enters an 89, the output should be "Your letter grade is B". How should you complete the code? To answer, select the appropriate code segments in the answer area.

```
#Letter Grade Converter
grade = int(input("Enter a numeric grade"))
if grade <= 90:
if grade > = 90:
elif grade > 90:
elif grade >= 90:
      letter_grade = 'A'
if grade > 80:
if grade >= 80:
elif grade > 80:
elif grade >= 80:
      letter_grade = 'B'
 if grade > 70:
 if grade >= 70:
 elif grade > 70:
 elif grade >= 70:
       letter_grade = 'C'
 if grade > 65:
 if grade >= 65:
 elif grade > 65:
 elif grade >= 65:
         letter_grade = 'D'
  else:
         letter_grade = 'F'
```

Correct Answer:

```
#Letter Grade Converter
grade = int(input("Enter a numeric grade"))
if grade <= 90:
if grade >= 90:
elif grade > 90:
elif grade >= 90:
      letter_grade = 'A'
if grade > 80:
if grade >= 80:
elif grade > 80:
elif grade >= 80:
      letter_grade = 'B'
 if grade > 70:
 if grade >= 70:
 elif grade > 70:
 elif grade >= 70:
       letter_grade = 'C'
 if grade > 65:
 if grade >= 65:
 elif grade > 65:
 elif grade >= 65:
         letter_grade = 'D'
  else:
         letter_grade = 'F'
```