

第4部分 大数据技术与应用赛项工具 Python 模拟题（英文版）



Introduction to Programming Using Python

© 2018 Microsoft Corporation. All rights reserved.

Welcome

Welcome to this Microsoft Certification exam. The following information is provided to help you use your exam time most efficiently.

Exam Format and Question Formats

This exam session includes multiple sections. You will see introductory sections, the exam content, and post-exam sections. This exam might contain several question formats. The Help button located at the bottom of each question screen provides information on the question format shown.

Case Studies

This exam might contain case studies. If there are case studies, the number of cases is provided in the “Get ready to take the exam!” screen. We no longer time each case study separately. In other words, the amount of time you are given to complete this exam can be used at your discretion. You can spend as much time as you like on any given case or question; manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

1. Question 01

Evaluate the following Python arithmetic expression:

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

What is the result?

Answer Area

- A. 3
- B. 13
- C. 15**
- D. 69

2. Question 02

Northwind Traders has hired you as an intern on the coding team that creates e-commerce applications.

You must write a script that asks the user for a value. The value must be used as a whole number in a calculation, even if the user enters a decimal value.

You need to write the code to meet the requirements.

Which code segment should you use?

Answer Area

- A. `totalItems = int(input("How many items would you like?"))`**
- B. `totalItems = str(input("How many items would you like?"))`
- C. `totalItems = float(input("How many items would you like?"))`
- D. `totalItems = input("How many items would you like?")`

3. Question 03

You are creating a Python program that shows a congratulation message to employees on their service anniversary.

You need to calculate the number of years of service and print a congratulatory message.

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

01 `start = input("How old were you on your start date?")`

02 `end = input("How old are you today?")`

03

You need to complete the program.

Which code should you use at line 03?

Answer Area

- A. `print("congratulations on " + int(end - start) + " years of service!")`
- B. `print("congratulations on " + (int(end) - int(start)) + " years of service!")`
- C. `print("congratulations on " + str(end - start) + " years of service!")`
- D. `print("congratulations on " + str(int(end) - int(start)) + " years of service!")`**

4. Question 04

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?

Answer Area

A. Place the notes after the last line of code separated by a blank line.

B. Place the notes inside of parentheses on any line.

C. Place the notes after the # sign on any line.

D. Place the notes before the first line of code separated by a blank line.

5. Question 05

You are writing an application that uses the sqrt function. The program must reference the function using the name squareRoot.

You need to import the function.

Which code segment should you use?

Answer Area

A. from math import sqrt as squareRoot

B. from math.sqrt as squareRoot

C. import math.sqrt as squareRoot

D. import sqrt from math as squareRoot

6. Question 06

This question requires that you evaluate the underlined text to determine if it is correct.

You write the following code:

```
import sys
try:
    file_in = open("in.txt", 'r')
    file_out = open("out.txt", 'w+')
except IOError:
    print('cannot open', file_name)
else:
    i = 1
    for line in file_in:
        print(line.rstrip())
        file_out.write("line " + str(i) + ": " + line)
        i = i + 1
    file_in.close()
    file_out.close ()
```

The out.txt file does not exist. You run the code. The code will execute without error.

Review the underlined text. If it makes the statement correct, select “No change is needed.” If the statement is incorrect, select the answer choice that makes the statement correct.

Answer Area**A. No change is needed.**

B. The code runs, but generates a logic error.

C. The code will generate a runtime error.

D. The code will generate a syntax error.

7. Question 07

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:
04     line = inventory.readline()
05
06
07     print(line)
08 else:
09     print ("End of file")
10     eof = True
11     inventory.close()
```

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

Answer Area

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

8. Question 08

Tailspin Toys uses Python to control its new toy Happy Clown. The program has errors that cause the clown to run around in an infinite circle.

You have been hired to help debug the following Happy Clown code. Line numbers are included for reference only.

```
01 import math
02 #default motion for happy clown
03 power = True
04 move = 0
05 while(power):
06     if move == 0:
07         turnValue = math.pi/move
08         move+=5
09     else:
10         turnValue = 0
11         move = 0
```

Which error exists in the code?

Answer Area

- A. Line 05 has a syntax error because it should read (power == True).
- B. Line 08 has a syntax error because += is an invalid statement.
- C. Line 07 causes a runtime error due to division by zero.**
- D. Line 05 causes a runtime error because the expression is incomplete.

9. Question 09

Woodgrove Bank is migrating their legacy bank transaction code to Python.

You have been hired to document the migrated code.

Which documentation syntax is correct?

Answer Area

- A. Returns the current balance of the bank account
def get_balance():
 return balance
- B. def get_balance():
 /*Returns the current balance of the bank account*/
 return balance
- C. //Returns the current balance of the bank account
def get_balance():
 return balance
- D. def get_balance():
 #Returns the current balance of the bank account
 return balance**

10. Question 10

You develop a Python application for your company.

You need to accept input from the user and print that information to the user screen.

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

```
01 print("What is your name?")
02
03 print(name)
```

Which code should you write at line 02?

Answer Area

A. name = input

B. input(name)

C. name = input()

D. input("name")

11. Question 11

You develop a Python application for your school.

You need to read and write data to a text file. If the file does not exist it must be created.

If the file has content the content must be removed.

Which code should you use?

Answer Area

A. open("local_data", "r+")

B. open("local_data", "w+")

C. open("local_data", "r")

D. open("local_data", "w")

12. Question 12

You evaluate the following code:

```
numList = [0,1,2,3,4]
print(5 in numList)
```

What is the output of the print statement?

Answer Area

A. 4

B. False

C. True

D. 5

13. Question 13

A classmate has asked you to debug the following code:

```
x = 4
while x >= 1:
    if x % 4 == 0:
        print ("party")
    elif x - 2 < 0:
        print("cake")
    elif x / 3 == 0:
        print("greeting")
    else:
        print("birthday")
    x = x - 1
```

What is the output that is printed to the screen?

Answer Area

- A. birthday
 party
 greeting
 cake
- B. party**
 birthday
 birthday
 cake
- C. party
 greeting
 birthday
 cake
- D. birthday
 greeting
 party
 cake

14. Question 14

You write the following code:

```
list_1 = [1, 2]
list_2 = [3, 4]
list_3 = list_1 + list_2
list_4 = list_3 * 3
print(list_4)
```

You run the code.

What is the output value?

Answer Area

A. [3, 6, 9, 12]

B. [1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4]

C. [[1, 2], [3, 4], [1, 2], [3, 4], [1, 2], [3, 4]]

D. [[1, 2, 3, 4], [1, 2, 3, 4], [1, 2, 3, 4]]

15. Question 15

You are writing a Python application for a dance studio.

The studio wants to encourage youth and seniors to sign up. Minors and seniors must receive a 10% discount.

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

```
01 def get_discount(minor, senior):  
02     discount = .1  
03  
04     discount = 0  
05     return discount
```

You need to complete the code.

Which code should you add on line 03?

Answer Area

A. if not (minor and senior):

B. if not (minor or senior):

C. if (not minor) and senior:

D. if (not minor) or senior:

16. Question 16

You develop a Python application for your school.

A list named colors contains 200 colors. You need to slice the list to display every other color starting with the second color.

Which code should you use?

Answer Area

A. colors[1:2]

B. colors[:2]

C. colors[2:2]

D. colors[1::2]

17. Question 17

You write the following code:

```
import datetime
d = datetime.datetime(2017, 4, 7)
print('{:%B-%d-%y}' .format(d))
num=1234567.890
print('{:, .4f}' .format(num))
```

You run the program.

What is the output?

Answer Area

- A. 2017--April--07
1,234,567.890
Press any key to continue...
- B. Apr--07--2017
1,234,567,8900
Press any key to continue...
- C. April--07--17
1,234,567.8900
Press any key to continue...
- D. April--07--17
1234567.89
Press any key to continue...

18. Question 18

You develop a Python application for your company.

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

```
01 def main(a,b,c,d):
02     value = a+b*c-d
03     return value
```

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

Answer Area

Which part of the expression will be evaluated first? [1] _____.

Which operation will be evaluated second? [2] _____.

Which expression is equivalent to the expression in the function? [3] _____.

- [1] A. a+b B. b*c C. c-d
- [2] A. addition B. subtraction
- [3] A. (a+b) * (c-d) B. (a + (b*c)) - d C. a + ((b*c) - d)

19. Question 19

You create the following program to locate a conference room and display the room name. Line numbers are included for reference only.

```
01 rooms = {1: 'Foyer', 2: 'conference Room'}
02 room = input('Enter the room number: ')
03 if not room in rooms:
04     print('Room does not exist.')
05 else:
06     print("The room name is " + rooms[room])
```

Colleagues report that the program sometimes produces incorrect results.

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

Answer Area

Which two data types are stored in the rooms list at line 01? [1] _____.

What is the data type of room at line 02? [2] _____.

Why does line 03 fail to find the rooms? [3] _____.

[1] A. bool and string B. float and bool **C. int and string** D. float and int

[2] A. bool B. float C. int **D. string**

[3] A. Invalid syntax **B. Mismatched data type(s)**

C. Misnamed variable(s)

20. Question 20

You find errors while evaluating the following code. Line numbers are included for reference only.

```
01 numbers = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9)
02 index = 0
03 while (index < 10)
04     print(numbers[index])
05
06 if numbers(index) == 6
07     break
08 else :
09     index += 1
```

You need to correct the code at line 03 and line 06.

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

Answer Area

Which code segment should you use at line 03? [1] _____.

Which code segment should you use at line 06? [2] _____.

[1] **A. while(index < 10):** B. while[index < 10]

C. while(index < 5): D. while[index < 5]

[2] A. if numbers[index] == 6 **B. if numbers[index] == 6:**

C. if numbers(index) == 6 D. if numbers(index) == 6:

21. Question 21

You are writing a program that calculates a user's year of birth. The program asks users for their age and the current year, then outputs the user's year of birth. You write the following code.

Line numbers are included for reference only.

```
01 age = input("Enter your age: ")
02 year = input("Enter the four digit year: ")
03 born = eval(year) - eval(age)
04 message = "You were born in " + str(born)
05 print(message)
```

You need to ensure that the program uses the appropriate data types.

What data types are used? Use the drop-down menus to select the answer choice that answers each question based on the information presented in the code segment.

NOTE: Each correct selection is worth one point.

Answer Area

What data type is age in line 01? [1] _____.

What data type is born in line 03? [2] _____.

What data type is message in line 04? [3] _____.

[1] A. int **B. str** C. float D. bool

[2] **A. int** B. str C. float D. bool

[3] A. int **B. str** C. float D. bool

22. Question 22

You write the following code:

```
a = 'Config'
print(a)
b = a
a += 'config2'
print(a)
print(b)
```

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

Answer Area

What is displayed after the first print? [1] _____.

What is displayed after the second print? [2] _____.

What is displayed after the third print? [3] _____.

[1] **A. Config1** B. Config1Config2 C. Config2

[2] A. Config1 **B. Config1Config2** C. Config2

[3] **A. Config1** B. Config1Config2 C. Config2

23. Question 23

You are writing a function that returns the data type of the value that is passed in. You write the following code. Line numbers are included for reference only.

```
01 def checkType(value):
02     dataType = type(value)
03     return dataType
04     print(checkType(True))
05     print(checkType(1.0))
06     print(checkType(1))
07     print(checkType("True"))
```

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

Answer Area

What is printed at line 04? [1] _____.

What is printed at line 05? [2] _____.

What is printed at line 06? [3] _____.

What is printed at line 07? [4] _____.

[1] A. <class 'bool'> B. <class 'float'> C. <class 'int'> D. <class 'str'>

[2] A. <class 'bool'> B. <class 'float'> C. <class 'int'> D. <class 'str'>

[3] A. <class 'bool'> B. <class 'float'> C. <class 'int'> D. <class 'str'>

[4] A. <class 'bool'> B. <class 'float'> C. <class 'int'> D. <class 'str'>

24. Question 24

You need to write code that generates a random float with a minimum value of 0.0 and a maximum value of 1.0.

Which statement should you use?

Answer Area

A. random.randrange()

B. random.randrange(0.0, 1.0)

C. random.random()

D. random.randint(0, 1)

25. Question 25

You write a function that reads a data file and prints each line of the file.

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

```
01 def read_file(file):
02     line = None
03     if os.path.isfile(file):
04         data = open(file, 'r')
05         for line in data:
06             print(line)
```

When you run the program, you receive an error on line 03.

What is causing the error?

Answer Area

- A. The path method does not exist in the os object.
- B. The isfile method does not exist in the path object.
- C. You need to import the os library.**
- D. The isfile method does not accept one parameter.

26. Question 26

You develop a Python application for your company.

A list named employees contains 200 employee names, the last five being company management. You need to slice the list to display all employees excluding management. Which two code segments should you use? Each correct answer presents a complete solution. **Choose two.**

Answer Area

- A. employees[0:-4]
- B. employees [1:-5]
- C. employees[:-5]**
- D. employees [0:-5]**
- E. employees [1:-4]

27. Question 27

Adventure Works Cycles 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.

```
01
02 name = input("What is your name? ")
03 return name
04
05 calories = miles * calories_per_mile
07 return calories
08 distance = int(input("How many miles did you bike this week? "))
09 burn_rate = 50
10 biker = get_name()
11 calories_burned = calc_calories(distance, burn_rate)
12 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.**

Answer Area

- 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):`

28. Question 28

You are writing code that generates a random integer with a minimum value of 5 and a maximum value of 11.

Which two functions should you use? Each correct answer presents a complete solution.

Choose two.

Answer Area

A. `random.randint(5, 11)`

B. `random.randrange(5, 12, 1)`

C. `random.randint(5, 12)`

D. `random.randrange(5, 11, 1)`

29. Question 29

You are creating a function that manipulates a number. The function has the following requirements:

- . A float is passed into the function
- . The function must take the absolute value of the float
- . Any decimal points after the integer must be removed

Which two math functions should you use? Each correct answer is part of the solution.

Choose two.

Answer Area

A. `math.ceil(x)`

B. `math.fmod(x)`

C. `math.floor(x)`

D. `math.frexp(x)`

E. `math.fabs(x)`

30. Question 30

Woodgrove Bank must generate a report that shows the average balance for all customers each day. The report must truncate the decimal portion of the balance.

Which two code segments should you use? Each correct answer presents a complete solution. **Choose two.**

Answer Area

A. `average_balance = total_deposits**number_of_customers`

B. `average_balance = total_deposits//number_of_customers`

C. `average_balance = int(total_deposits/number_of_customers)`

D. `average_balance = float(total_deposits//number_of_customers)`

31. Question 31

You work on a team that is developing a game for AdventureWorks.

You need to write code that generates a random number that meets the following requirements:

- . The number is a multiple of 5.
- . The lowest number is 5.
- . The highest number is 100.

Which two code segments will meet the requirements? Each correct answer presents a complete solution. **Choose two.**

Answer Area

- A. `from random import randrange`
`print(randrange(5, 100, 5))`
- B. `from random import randint`
`print(randint(1, 20) * 5)`
- C. `from random import randint`
`print(randint(0, 20) * 5)`
- D. `from random import randrange`
`print(randrange(0, 100, 5))`

32. Question 32

You are creating a function that reads a data file and prints each line of the file.

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

```
01 import os
02 def read_file(file):
03     line = None
04     if os.path.isfile(file):
05         data = open(file, 'r')
06         while line != '':
07             line = data.readline()
08             print(line)
```

The code attempts to read the file even if the file does not exist.

You need to correct the code.

Which three lines have indentation problems? Each correct answer presents part of the solution. **Choose three.**

Answer Area

- A. Line 01
- B. Line 02
- C. Line 03
- D. Line 04
- E. Line 05
- F. Line 06
- G. Line 07
- H. Line 08

33. Question 33

You are creating an ecommerce script that accepts input from the user and outputs the data in a comma delimited format.

You write the following lines of code to accept input

```
item = input("Enter the item name: ")
sales = input("Enter the quantity: ")
```

The output must meet the following requirements:

- . Strings must be enclosed inside of double-quotes
- . Numbers must not be enclosed in quotes or other characters
- . Each item must be separated with a comma

You need to complete the code to meet the requirements.

Which three code segments should you use? Each correct answer presents a complete solution. **Choose three.**

Answer Area

- A. `print("{}{0}",{1}'.format(item, sales))`
- B. `print(item + ',' + sales)`
- C. `print("'" + item + "'," + sales)`
- D. `print("{}{0},{1}'.format(item, sales))`
- E. `print("{}%s", %s' % (item, sales))`

34. Question 34

You are building a Python program that displays all of the prime numbers from 2 to 100.

How should you complete the code? To answer, drag the appropriate code segments 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.

Code Segments

- [A] `p=2`
`while p <= 100:`
`is_prime = True`
- [B] `p=2`
`is_prime = True`
`while p <= 100:`
- [C] `break`
- [D] `continue`
- [E] `p = p + 1`
- [F] `for i in range(2, p):`
`if p / i == 0:`
`is_prime = False`
- [G] `for i in range(2, p):`
`if p % i == 0:`
`is_prime = False`

Answer Area

```
[1] _____.
[2] _____.
[3] _____.
if is_prime == True:
    print(p)
[4] _____.
```

agce

35. Question 35

You are developing a Python application for your company.

You write the following code:

```
numList = [1,2,3,4,5]
alphaList = ["a","b","c","d","e"]
print(numList is alphaList)
print(numList == alphaList)
numList = alphaList
print(numList is alphaList)
print(numList == alphaList)
```

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

Answer Area

	Yes	No
What is displayed after the first print?	<input checked="" type="radio"/>	<input type="radio"/>
What is displayed after the second print?	<input type="radio"/>	<input checked="" type="radio"/>
What is displayed after the third print?	<input checked="" type="radio"/>	<input type="radio"/>
What is displayed after the fourth print?	<input checked="" type="radio"/>	<input type="radio"/>

36. Question 36

During school holidays, you volunteer to explain some basic programming concepts to your younger siblings.

You want to introduce the concept of data types in Python. You create the following three code segments:

* Code segment 1

```
x1 = "20"
y1 = 3
a = x1 * y1
```

* Code segment 2

```
x2 = 6
y2 = 4
b = x2 / y2
```

* Code segment 3

```
x3 = 2.5
y3 = 1
c = x3 / y3
```

You need to evaluate the code segments.

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

Answer Area

	Yes	No
After executing code segment 1, the data type of variable a is str.	<input checked="" type="radio"/>	<input type="radio"/>
After executing code segment 2, the data type of variable b is float.	<input checked="" type="radio"/>	<input type="radio"/>
After executing code segment 3, the data type of variable c is int.	<input type="radio"/>	<input checked="" type="radio"/>

37. Question 37

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 4 raise x to the y power
```

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

Answer Area

	Yes	No
Lines 01 through 04 will be ignored for syntax checking.	<input checked="" type="radio"/>	<input type="radio"/>
The pound sign (#) is optional for lines 02 and 03.	<input type="radio"/>	<input checked="" type="radio"/>
The string in line 06 will be interpreted as a comment.	<input type="radio"/>	<input checked="" type="radio"/>
Line 07 contains an inline comment.	<input checked="" type="radio"/>	<input type="radio"/>

38. Question 38

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

Answer Area

	Yes	No
A try statement can have one or more except clauses.	<input checked="" type="radio"/>	<input type="radio"/>
A try statement can have a finally clause without an except clause.	<input checked="" type="radio"/>	<input type="radio"/>
A try statement can have a finally clause and an except clause.	<input checked="" type="radio"/>	<input type="radio"/>
A try statement can have one or more finally clauses.	<input type="radio"/>	<input checked="" type="radio"/>

39. Question 39

You are writing a function that increments the player score in a game.

The function has the following requirements:

. If no value is specified for points, then points start at one

. If bonus is True, then points must be doubled

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

```
01 def increment_score(score, bonus, points):
02     if bonus == True:
03         points = points * 2
04     score = score + points
05     return score
06 points = 5
07 score = 10
08 new_score = increment_score(score, True, points)
```

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

Answer Area

	Yes	No
To meet the requirements, line 01 must be changed to the following: def increnient_score(score, bonus, points = 1):	<input checked="" type="radio"/>	<input type="radio"/>
Once any parameter is defined with a default value, any parameters to the right must also be defined with default values.	<input checked="" type="radio"/>	<input type="radio"/>
If the function is called with only two parameters, the value of the third parameter will be None.	<input type="radio"/>	<input checked="" type="radio"/>
Line 03 will also modify the value of the variable points declared at line 06.	<input type="radio"/>	<input checked="" type="radio"/>

40. Question 40

You are creating a Python program that compares numbers.

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

```
01 num1 = eval(input ("Please enter the first number: "))
02 num2 = eval(input ("Please enter the second number: "))
03 if num1 == num2:
04     print("The two numbers are equal.")
05 if num1 <= num2:
06     print("Number 1 is less than number 2.")
07 if num1 > num2:
08     print("Number 1 is greater than number 2.")
09 if num2 = num1:
10     print("The two numbers are the same.")
```

You need to ensure that the comparisons are accurate.

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

Answer Area

	Yes	No
The print statement at line 04 will only print if the two numbers are equal in value.	<input checked="" type="radio"/>	<input type="radio"/>
The print statement at line 06 will only print if num1 is less than num2.	<input type="radio"/>	<input checked="" type="radio"/>
The print statement at line 08 will only print if num1 is greater than num2.	<input checked="" type="radio"/>	<input type="radio"/>
The statement at line 09 is an invalid comparison.	<input checked="" type="radio"/>	<input type="radio"/>

41. Question 41

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.

Code Segments

- [A] else:
print(name, "is upper case.")
-
- [B] else:
print(name, "is mixed case.")
-
- [C] else:
print(name, "is lower case.")
-
- [D] if name.lower() == name:
print(name, "is all lower case.")
-
- [E] elif name.upper() == name:
print(name, "is all upper case.")
-
- [F] name = input("Enter your name: ")

Answer Area

[1-6] _____.

42. Question 42

Tailspin Toys is converting an existing application to Python. You are creating documentation that will be used by several interns who are working on the team. You need to ensure that arithmetic expressions are coded correctly. What is the correct order of operations for the six classes of operations ordered from first to last in order of precedence? To answer, move all operations from the list of operations to the answer area and arrange them in the correct order.

Operations

- [A] And
-
- [B] Addition and Subtraction
-
- [C] Multiplication and Division
-
- [D] Exponents
-
- [E] Parenthesis
-
- [F] Unary positive, negative, not

Answer Area

[1-6] _____.

43. Question 43

You are writing a function that works with files.

You need to ensure that the function returns None if the file does not exist. If the file does exist, the function must return the first line.

You write the following code:

```
import os
def get_first_line(filename, mode):
```

In which order should you arrange the code segments to complete the function? To answer, move all code segments from the list of code segments to the answer area and arrange them in the correct order.

Code Segments

- [A] return file.readline()
- [B] else:
- [C] if os.path.isfile(filename):
- [D] with open(filename, 'r') as file:
- [E] return None

cdabe

Answer Area

[1-5] _____.

44. Question 44

You are writing a function in Python that must meet the following requirements:

- . The function accepts a list and a string as parameters.
- . The function must search for the string in the list,
- . If the string is found in the list, the function must print a message indicating that the string was found and then stop iterating through the list.
- . If the string is not found, the function must print a message indicating that the string was not found in the list.

In which order should you arrange the code segments to develop the solution? To answer, move all code segments from the list of code segments to the answer area and arrange them in the correct order.

Code Segments

- [A] for i in range(len(items)):
- [B] else:
- print("{0} as not found in the list.".format(term))
- [C] if items[i] == term:
- print("{0} was found in the list.".format(term))
- [D] break
- [E] def search(items, term):

eacdb

Answer Area

[1-5] _____.

45. Question 45

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.

Code Segments

[A] -

[B] (

[C])

[D] **

[E] **2

[F] 2

[G] A

bafce

Answer Area

b = _____.

46. Question 46

You are writing a function to read a data file and print the results as a formatted table.

The data file contains information about fruit. Each record contains the name of the fruit the weight and the price.

You need to print the data so that it looks like the following sample:

```
Oranges  5.6  1.33
Apples    2.0  0.54
Grapes   10.2  10.96
```

Specifically, the print out must meet the following requirements:

- . The fruit name must print left-aligned in a column 10 spaces wide.
- . The weight must print right-aligned in a column 5 spaces wide with up to one digit after the decimal point.
- . The price must print right-aligned in a column 7 spaces wide with up to two digits after the decimal point.

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

```
01 def print_table(file):
02     data = open(file, 'r')
03     for record in data:
04         fields = record.split(",")
05
```

agfe

How should you complete line 05? To answer, drag the appropriate code segments 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.

Code Segments

[A] `print("`

[B] `{10:0}`

[C] `{5:1f}`

[D] `{7:2f}`

[E] `{2:7.2f}`

[F] `{1:5.1f}`

[G] `{0:10}`

Answer Area

[1] `_____`. `".format(fields[0], eval(fields[1]), eval(fields[2]))`

47. Question 47

You are writing a Python program to perform arithmetic operations.

You create the following code:

`a = 11`

`b = 4`

What is the result of each arithmetic expression? To answer, drag the appropriate expression from the column on the left to its result on the right. Each expression may be used once, more than once, or not at all.

Results Answer Area

[A] `print(a / b)`

[B] `print(a // b)`

[C] `print(a % b)`

bca

Answer Area

2 [1] `_____`.

3 [2] `_____`.

2.75 [3] `_____`.

48. Question 48

Match the data type to the type operations.

To answer, drag the appropriate data type to the correct type operation. Each data type may be used once, more than once, or not at all.

Data Types

[A] `int`

[B] `float`

[C] `str`

[D] `bool`

bbcd

Answer Area

`type(+1E10)` [1] `_____`.

`type(5.0)` [2] `_____`.

`type("True")` [3] `_____`.

`type(False)` [4] `_____`.

49. Question 49

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.

Data Types

[A] int

[B] float

[C] str

[D] bool

adcbc

Answer Area

[1] _____. age = 2

[2] _____. minor = False

[3] _____. name = "contoso"

[4] _____. weight = 123.5

[5] _____. zip = "81000"

50. Question 50

You have the following list structure:

```
alph = "abcdefghijklmnopqrstuvwxyz"
```

You need to evaluate the result of performing various slicing operations.

Match the result to the slicing operation. To answer, drag the appropriate result from the column on the left to its slicing operation on the right. Each result may be used once, more than once, or not at all.

Results

[A] zwtqnkheb

[B] pmjg

[C] defghijklmno

[D] ponmlkjihgfe

[E] defghijklmnop

[F] dgjm

[G] olif

[H] ""

cfhbda

Answer Area

[1] _____. alph[3:15]

[2] _____. alph[3:15:3]

[3] _____. alph[3:15:-3]

[4] _____. alph[15:3:-3]

[5] _____. alph[15:3]

[6] _____. alph[::-3]

51. Question 51

You are developing a Python program that compares numbers.

You need to ensure that you are using the correct comparison operators.

Evaluate each expression and indicate the correct result. To answer, drag the appropriate result from the column on the left to its expression on the right. Each result may be used once, more than once, or not at all.

NOTE: Each correct selection is worth one point.

Results

- [A] True
- [B] False
- [C] 5
- [D] None

Answer Area

- [1] _____ . 0 or 5
- [2] _____ . bool(0)
- [3] _____ . None is None
- [4] _____ . $-5 < 0 < 5$

cbaa

52. Question 52

You are creating a Python program that will let a user guess a number from 1 to 10. The user is allowed up to three guesses.

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

```
01 from random import randint
02 target = randint(1,10)
03 chance = 1
04 print ("Guess an integer from 1 to 10. You will have 3
chances.")
05
06 guess = int(input("Guess an integer: "))
07 if guess > target:
08     print ("Guess is too high")
09 elif guess < target:
10     print ("Guess is too low")
11 else:
12     print ("Guess is just right!")
13
14
```

ace

The program must allow three guesses. If the user guesses the correct number, the program must stop asking for guesses.

How should you complete lines 05, 13, and 14? To answer, drag the appropriate code segments to the correct locations. 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

Code Segments[A] while chance <= 3:[B] while chance < 3:[C] break[D] pass[E] chance += 1[F] while chance < 3[G] chance = 2**Answer Area**Which code segment should you use at line 05? [1] _____.Which code segment should you use at line 13? [2] _____.Which code segment should you use at line 14? [3] _____.**53. Question 53**

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	Letter grade
90 through 100	A
80 through 89	B
70 through 79	C
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.

Answer Area

```
#Letter Grade converter
```

```
grade = int(input("Enter a numeric grade"))
```

```
[1] _____.
```

```
    letter_grade = 'A'
```

```
[2] _____.
```

```
    letter_grade = 'B'
```

```
[3] _____.
```

```
    letter_grade = 'C'
```

```
[4] _____.
```

```
    letter_grade = 'D'
```

```
else:
```

```
    letter_grade = 'F'
```

```
print("Your letter grade is :", letter_grade)
```

[1] A. if grade <= 90: B. if grade >= 90: C. elif grade > 90: D. elif grade >= 90:

[2] A. if grade > 80: B. if grade >= 80: C. elif grade > 80: D. elif grade >= 80:

[3] A. if grade > 70: B. if grade >= 70: C. elif grade > 70: D. elif grade >= 70:

[4] A. if grade > 65: B. if grade >= 65: C. elif grade > 65: D. elif grade >= 65:

54. Question 54

You are writing a Python program to validate employee numbers.

The employee number must have the format ddd-dd-dddd and consist only of numbers and dashes. The program must print True if the format is correct and print False if the format is incorrect.

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

Answer Area

```
[1] _____ .
parts = ""

[2] _____ .

[3] _____ .
employee_number = input('Enter employee number (ddd-dd-dddd): ')
parts = employee_number.split('-')
if len(parts) == 3:
    if len(parts[0]) == 3 and len(parts[1]) == 2 and len(parts[2]) == 4:
        if parts[0].isdigit() and parts[1].isdigit() and
           parts[2].isdigit():
            [4] _____ .

print(valid)
```

baab

- | | |
|-------------------------------------|---|
| [1] A. Employee_number = "" | B. Employee_number = "sentinel" |
| [2] A. while employee_number != "": | B. while employee_number != "sentinel": |
| [3] A. valid = False | B. valid = True |
| [4] A. valid = False | B. valid = True |

55. Question 55

You are coding a math utility by using Python.

You are writing a function to compute roots.

The function must meet the following requirements:

If a is non-negative, return $a^{1/b}$

If a is negative and even, return "Result is an imaginary number"

If a is negative and odd, return $-(-a)^{1/b}$

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

Answer Area

```
def safe_root(a, b):
    [1] _____ .
    answer = a**(1/b)
    [2] _____ .
    [3] _____ .
    answer = "Result is an imaginary number"
    [4] _____ .
    answer = -(-a)**(1/b)
    return answer
```

acbc

- | | | | |
|-------------------|-------------------|----------|----------|
| [1] A. if a >= 0: | B. if a % 2 == 0: | C. else: | D. elif: |
| [2] A. if a >= 0: | B. if a % 2 == 0: | C. else: | D. elif: |
| [3] A. if a >= 0: | B. if a % 2 == 0: | C. else: | D. elif: |
| [4] A. if a >= 0: | B. if a % 2 == 0: | C. else: | D. elif: |

56. Question 56

You work for a company that distributes media for all ages.

You are writing a function that assigns a rating based on a user's age. The function must meet the following requirements:

- . Anyone 18 years old or older receives a rating of "A".
- . Anyone 13 or older, but younger than 18, receives a rating of "T".
- . Anyone 12 years old or younger receives a rating of "C".
- . If the age is unknown, the rating is set to "C".

You need to complete the code to meet the requirements.

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

Answer Area

```
def get_rating(age):
    rating = ""
    if [1]_____.
    elif [2]_____.
    elif [3]_____.
    else [4]_____.
    return rating
```

dabc

- | | |
|-------------------------------|------------------------------|
| [1] A. age < 13: rating = "C" | B. age < 18: rating = "T" |
| C. : rating = "A" | D. age == None: rating = "C" |
| [2] A. age < 13: rating = "C" | B. age < 18: rating = "T" |
| C. : rating = "A" | D. age == None: rating = "C" |
| [3] A. age < 13: rating = "C" | B. age < 18: rating = "T" |
| C. : rating = "A" | D. age == None: rating = "C" |
| [4] A. age < 13: rating = "C" | B. age < 18: rating = "T" |
| C. : rating = "A" | D. age == None: rating = "C" |

57. Question 57

You are developing a Python application for an online product distribution company.

You need the program to iterate through a list of products and escape when a target product ID is found.

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

NOTE: Each correct selection is worth one point.

Answer Area

```
productIdList = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
index = 0
[1]_____ (index < 10) :
```

```
print(productldList[index])
if productldList[index] == 6 :
    [2] _____.
else :
    [3] _____.

```

adc

- [1] A. while B. for C. if D. break
 [2] A. while B. for C. if D. break
 [3] A. continue B. break C. index += 1 D. index = 1

58. Question 58

Lucerne Publishing Company needs a way to find the count of particular letters in their publications to ensure that there is a good balance. It seems that there have been complaints about overuse of the letter e. You need to create a function to meet the requirements.

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

NOTE: Each correct selection is worth one point.

Answer Area

#Function accepts list of words from a file,
 #and letter to search for.
 #Returns count of a particular letter in that list.

```
def count_letter(letter, word_list):
    count=0
    for [1] _____.
        if [2] _____.
            count += 1
    return count

```

bd

```
word_list = []
#word_list is populated a from file, code not shown.
letter = input("which letter would you like to count")
letter_count= count_letter(letter, word_list)
print("There are: " letter_count, " instances of " + letter)

```

- [1] A. word_list in word: B. word in word_list:
 C. word == word_list: D. word is word_list:
 [2] A. word is letter: B. letter is word:
 C. word in letter: D. letter in word:

59. Question 59

You are an intern for Northwind Electric Cars. You must create a function that calculates the average velocity of their vehicles on a 1320 foot (1/4 mile) track. The output must be as precise as possible.

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

Answer Area

```
#Speed calculator
distance = [1]_____. (input("Enter the distance traveled in feet"))
distance_miles = distance/5280      #convert to miles
time = [2]_____. (input("Enter the time elapsed in seconds"))
time_hours = time/3600              #convert to hours
velocity = distance_miles/time_hours
print("The average velocity is : ", velocity, " miles/hour")
```

- [1] A. int **B. float** C. str
 [2] A. int B. str **C. float**

60. Question 60

Southridge Video 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.

NOTE: Each correct selection is worth one point.

Answer Area

```
#Southridge Video, DVD Rental calculator
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 [1]_____.
    days_rented +=1
if day_rented [2]_____.
    total = (days_rented * cost_per_day) * .7
elif day_rented [3]_____.
    total = (days_rented * cost_per_day) * .5
```

```
else:
    total = days_rented * cost_per_day
print("Cost of the END rental is : $', total)
[1] A. != "n":      B. == "n":      C. == "y":
[2] A. == "Sunday":  B. >= "Sunday":    C. is "Sunday":
[3] A. == "Thursday": B. <= "Thursday":    C. is "Thursday":
```

61. Question 61

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.

Answer Area

```
[1] _____. [2] _____.
    current += value
[3] _____.
[1] A. update_score B. def update_score C. return update_score
[2] A. (current, value): B. (): C. (current, value) D. ()
[3] A. pass current B. return current C. return D. pass
```

62. Question 62

Best For You Organics Company needs a simple program that their call center will use to enter survey data for a new coffee variety.

The program must accept input and return the average rating based on a five-star scale.

The output must be rounded to two decimal places.

You need to complete the code to meet the requirements.

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

NOTE: Each correct selection is worth one point.

Answer Area

```
sum = count = done = 0
average = 0.0
while (done != -1):
    rating = [1] _____.
    if rating == -1:
        break
    sum+= rating
    count+=1
average = float(sum/count)
[2] _____. + [3] _____.

```

- [1] A. `print(" Enter next rating (1-5), -1 for done")`
 B. `float(input(" Enter next rating (1-5), -1 for done"))`
 C. `input("Enter next rating (1-5), -1 for done")`
 D. `input "Enter next rating (1-5), -1 for done")`
- [2] A. `output("The average star rating for NetVerZleep coffee is: ")`
 B. `console.input("The average star rating for the new coffee is: ")`
 C. `println("The average star rating for the new coffee is: ")`
 D. `print("The average star rating for the new coffee is: ")`
- [3] A. `format(average, '.2f')`
 B. `format(average, '.2d')`
 C. `{average, '.2f'}`
 D. `format.average.{2d}`

63. Question 63

Tailspin Toys is building a basketball court for its employees to improve company morale.

You are creating a Python program that employees can use to keep track of their average score.

The program must allow users to enter their name and current scores. The program will output the user name and the users average score. The output must meet the following requirements:

- . The user name must be left-aligned.
- . If the user name has fewer than 20 characters, additional space must be added to the right.
- . The average score must have three places to the left of the decimal point and one place to the right of the decimal (XXX.X).

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

NOTE: Each correct selection is worth one point.

Answer Area

```
name = input("what is your name?")
score = 0
count = 0
while(score != -1):
    score = int(input("Enter your scores: (-1 to end)"))
    if score == -1:
        break
    sum += score
    count += 1
average_score = sum / count
print("[1]_____ , your average score is:
[2]_____ . " %(name, average))
```


- [1] A. %-20i B. %-20d C. %-20f **D. %-20s**
 [2] A. %1.4s **B. %4.1f** C. %4.1s D. %1.4f

64. Question 64

Relecloud Virtual Learning asks you to debug some code that is causing problems with their payroll. They ask you to find the source of the payroll errors.

The following variables have been declared:

```
employee_pay = [15000, 120000, 35000, 45000]
count = 0
sum = 0
```

There are two errors in the following code:

```
for index in range(0, len(employee_pay)-1)):
    count += 1
    sum += employee_pay[index]
average = sum//count
print("The total payroll is:", sum )
print("The average salary is:", average)
```

Which code should you use to fix the errors? To answer, select the appropriate code segments in the answer area.

Note: Each correct selection is worth one point.

Answer Area

```
for index in range [1] _____.
    count += 1
    sum += employee_pay[index]
average = [2] _____.
print("The total payroll is:", sum )
print("The average salary is:", average)
```

- [1] A. (size(employee_pay)): B. (size(employee_pay)-1):
 C. (len(employee_pay)+1): **D. (len(employee_pay)):**
 [2] **A. sum/count** B. sum**count C. sum*count

65. Question 65

You are creating a program that accepts user input. The program must cast the input into an integer. You must properly handle the error if the code cannot cast the input to an integer.

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

Answer Area

```
while True:
    [1] _____.
    x = int(input("Please enter a number: "))
    break
    [2] _____. ValueError:
    print("Not a valid number. Try again...")
```

- [1] **A. try:** B. else: C. except: D. raise: F: finally:
 [2] A. try: B. else: **C. except:** D. raise: F: finally:

66. Question 66

A coworker wrote a program that inputs names into a database. Unfortunately, the program reversed the letters in each name.

You need to write a Python function that outputs the characters in a name in the correct order

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

NOTE: Each correct selection is worth one point.

Answer Area

```
#Function reverses characters in a string.
```

```
#returns new string in reversed order.
```

```
def reverse_name(backwards_name):
```

```
    forward_name = ''
```

```
    for index in [1]_____.
```

```
        forward_name += [2]_____.
```

```
    return forward_name
```

```
print(reverse_name("leinad"))      #test_ case
```

- [1] A. backwards_name: B. len(backwards_name):
 C. range(0, len(backwards_name),-1): **D. range(len(backwards_name)-1,-1,-1):**
 [2] A. backwards_name[index-1]
 B. backwards_name[len(forward_name)-1]
 C. backwards_name[len(backward_name)- len(forwardname)]
 D. backwards_name[index]

67. Question 67

You are writing a function to perform safe division.

You need to ensure that a denominator and numerator are passed to the function and that the denominator is not zero.

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

Answer Area

```
def safe_divide(numerator, denominator):
```

```
    [1]_____.
```

```
        print("A required value is missing.")
```

```
    [2]_____.
```

```
        print("The denominator is zero.")
```

```
    else:
```

```
        return numerator I denominator
```

- [1] **A. if numerator is None or denominator is None:**
 B. if numerator is None and denominator is None:
 C. If numerator = None or denominator = None:
 D. if numerator = None and denominator = None:
- [2] **A. elif denominator == 0:** B. elif denominator = 0:
 C. elif denominator != 0: D. elif denominator in 0:

68. Question 68

Northwind Electric Cars needs help updating their file system using Python code. You must create a simple file manipulation program that performs the following actions:

- . Checks to see if a file exists.
- . If the file exists, displays its contents.
- . If the file does not exist, creates a file using the specified name.
- . Appends the phrase, "End of listing" to the file.

You need to complete the code to meet the requirements.

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

NOTE: Each correct selection is worth one point.

Answer Area

```
import os
if [1] _____.
    file = open('myFile.txt')
[2] _____.
    file.close()
file= [3] _____.
[4] _____. ("End of listing")
```

- | | |
|--------------------------------|---|
| [1] A. isfile('myFile.txt'): | B. os.exist('myFile.txt'): |
| C. os.find('myFile.txt'): | D. os.path.isfile('myFile.txt'): |
| [2] A. output('myFile.txt') | B. print(file.get('myFile.txt')) |
| C. print(file.read()) | D. print('myFile.txt') |
| [3] A. open('myFile.txt', 'a') | B. open('myFile.txt', 'a+') |
| C. open('myFile.txt', 'w') | D. open('myFile.txt', 'w+') |
| [4] A. append | B. file.add |
| C. file.write | D. write |

69. Question 69

You are writing a Python program to ask the user to enter a number and determine if the number is 1 digit 2 digits, or more than 2 digits long.

You need to write the program.

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

Answer Area

```
num = int(input("Enter a number with 1 or 2 digits: "))
```

```
digits = 0;
```

```
[1] _____.  
    digits = "1"
```

```
[2] _____.  
    digits = 2
```

```
[3] _____.  
    digits = ">2"
```

```
print(digits + " digits.")
```

[1] **A. if num > -10 and num < 10:**

B. if num > -100 and num < 100:

[2] **A. if num > -100 and num < 100:**

B. elif num > -100 and num < 100:

C. if num > -10 and num < 10:

D. elif num > -10 and num < 10:

[3] **A. else:**

B. elif:

aba

70. Question 70

Wingtip Toys is creating an interactive Times Table Helper program intended for elementary school children.

You need to complete a function that computes and displays all multiplication table combinations from 2 to 12.

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

Answer Area

```
#Displays times tables 2 - 12
```

```
def times_tables():
```

```
    [1] _____.
```

```
    [2] _____.
```

```
        print( row*col, end="  ")
```

```
    print()
```

```
#main
```

```
times_tables( )
```

[1] **A. for col in range(13):**

B. for col in range(2, 13):

C. for col in range(2, 12, 1):

D. for col in range(12):

[2] **A. for row in range(13):**

B. for row in range(2, 13):

C. for row in range(2, 12, 1):

D. for row in range(12):

71. Question 71

Adventure Works Cycles sales are so exceptional that they decide to give a bonus to all employees who do not make more than \$150,000. The following formula applies to each employee

based on their base salary and a flat bonus:

New salary = current salary x 3% + a \$500 bonus.

You write code that reads the employee salaries into a variable named salary_list.

You need to complete the code that applies an increase to each eligible employee's salary.

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

Answer Area

```
#Each salary in the list is updated based on increase. Employees
making.
#$150,000 or more will not get a raise.
#Salary list is populated from employee database, code not shown.
[1] _____.
```

```
    if salary_list[index] >= 150000:
        [2] _____.
        salary_list[index] = (salary_list[index] * 1.03) + 500
```

- [1] A. for index in range(len(salary_list)+1):
 B. for index in range(len(salary_list)-1):
C. for index in range(len(salary_list)):
 D. for index in salary_list:

- [2] A. exit() **B. continue** C. break D. end

72. Question 72

You are creating a function to calculate admission fees by using Python. Admission fees are calculated based on the following rules:

- . Anyone under age 5 = free admission
- . Anyone age 5 or older who is in school = 10 USD
- . Anyone age 5 to 17 who is not in school = 20 USD
- . Anyone older than age 17 who is not in school = 50 USD

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

Answer Area

```
def admission_fee(age, school):
    rate = 0
    [1] _____.
    rate = 10
    [2] _____.
    [3] _____.
    rate = 20
    else:
        rate = 50
    return rate
```

- [1] **A. if age >= 5 and school == True:** B. if age >= 5 and age <= 17:
 C. if age >= 5 and school == False:
 [2] A. elif age >= 5 and school == False: **B. else age >= 5 and school == False:**
 C. elif age >= 5 and school == True:
 [3] A. if age >= 5 and school == True: B. if age >= 5 and school == False:
C. if age <= 17:

73. Question 73

You develop a Python application for your company.

How should you complete the code so that the print statements are accurate? To answer, select the appropriate code segments in the answer area.

Answer Area

```
numList = [1,2,3,4,5]
alphaList = ["a","b",'c',"d",'e']
[1] _____.
    print("The values in numList are equal to alphaList")
[2] _____.
    print("The values in numList are not equal to alphaList")
```

- | | | |
|-----|------------------------------------|----------------------------|
| [1] | A. if numList == alphaList: | B. if numList == alphaList |
| | C. else: | D. else |
| [2] | A. if numList == alphaList: | B. if numList == alphaList |
| | C. else: | D. else |

第7部分 Python 模拟题（英文版）参考答案

MTA 98-381: *Introduction to Programming Using Python*

题号	01	02	03	04	05	06	07
答案	C	A	D	C	A	A	D
题号	08	09	10	11	12	13	14
答案	C	D	C	B	B	B	B
题号	15	16	17	18	19	20	21
答案	A	D	C	BAB	CDB	AB	BAB
题号	22	23	24	25	26	27	28
答案	ABA	ABCD	C	C	CD	AF	AD
题号	29	30	31	32	33	34	35
答案	CE	BC	AB	FGH	ACE	AGCE	YNY Y
题号	36	37	38	39	40	41	42
答案	YYN	YNNY	YYYN	YYNN	YNY Y	FDEB	EDFCBA
题号	43	44	45	46	47	48	49
答案	CDABE	EACDB	BAFCE	AGFE	BCA	BBCD	ADCBC
题号	50	51	52	53	54	55	56
答案	CFHBDA	CBAA	ACE	BDDD	BAAB	ACBC	DABC
题号	57	58	59	60	61	62	63
答案	ADC	BD	BC	BAA	BAB	BDA	DB
题号	64	65	66	67	68	69	70
答案	DA	AC	DC	AA	DCBC	ABA	BB
题号	71	72	73				
答案	CB	ABC	AC				