Vendor: Microsoft

Exam Code:98-381

Exam Name: Introduction to Programming Using Python

Version: Demo

QUESTION 1

HOTSPOT

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.

Hot Area:

Answer Area

```
def get_rating(age):
    rating = ""
    if [ ▼ ]
        elif [ ▼ ]
            elif [ ▼ ]
                else [ ▼ ]
    return rating
```

if / elif / elif / else
age < 13: rating = "C"
age < 18: rating = "T"
: rating = "A"
age == None: rating = "C"

Correct Answer:

Answer Area

```
def get_rating(age):
    rating = ""
    if [ age < 13: rating = "C" | age < 18: rating = "T" | : rating = "A" | age == None: rating = "C" ]
    elif [ age < 13: rating = "C" | age < 18: rating = "T" | : rating = "A" | age == None: rating = "C" ]
    elif [ age < 13: rating = "C" | age < 18: rating = "T" | : rating = "A" | age == None: rating = "C" ]
    else [ age < 13: rating = "C" | age < 18: rating = "T" | : rating = "A" | age == None: rating = "C" ]
    return rating
```

References: https://www.w3resource.com/python/python-if-else-statements.php

---

QUESTION 2

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?

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

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

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

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

Correct Answer: C

Modes \\'r+\\', \\'w+\\' and \\'a+\\' open the file for updating (reading and writing). Mode \\'w+\\' truncates the file.

References:

https://docs.python.org/2/library/functions.html

https://pythontips.com/2014/01/15/the-open-function-explained/

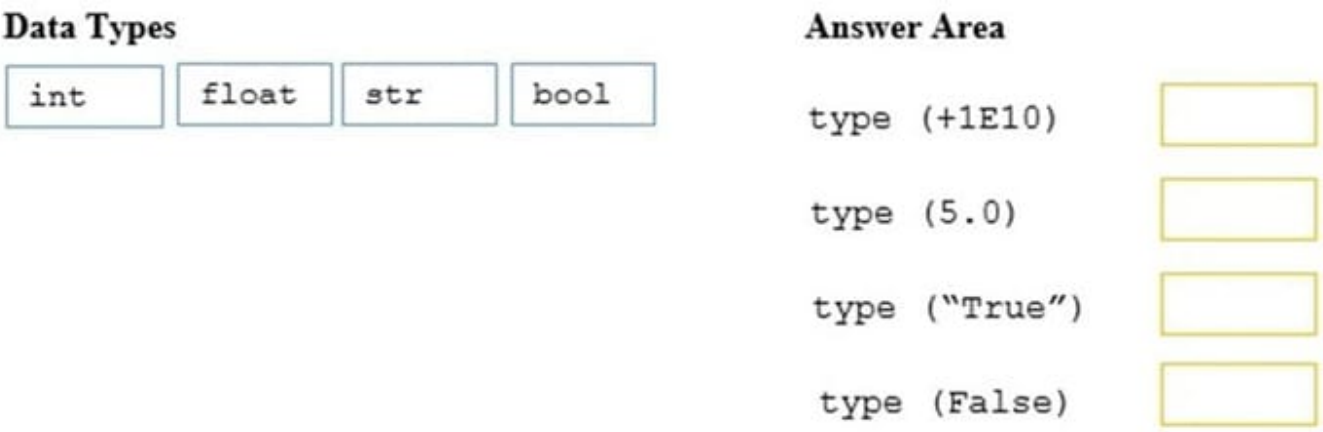
QUESTION 3

DRAG DROP

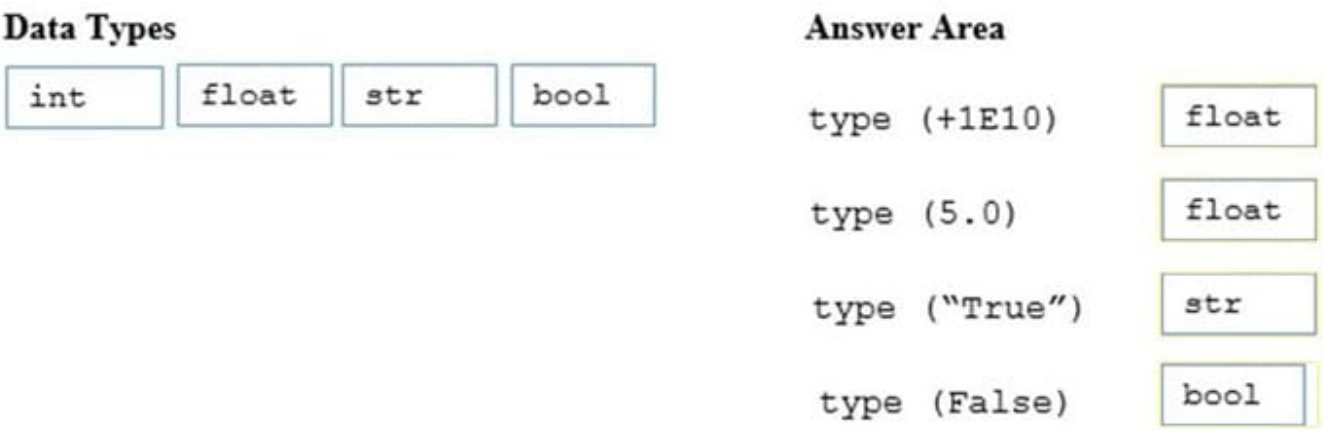
Match the data type to the type operations.

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.

Select and Place:



Correct Answer:



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

---

QUESTION 4

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?

A.
```
05   if line != '\n':
06     if line != "":
```

B.
```
05   if line != '\n':
06     if line != None:
```

C.
```
05   if line != '':
06     if line != "":
```

D.
```
05   if line != '':
06     if line != "\n":
```

A. Option A

B. Option B

C. Option C

D. Option D

Correct Answer: A

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

QUESTION 5

HOTSPOT

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.

Hot Area:

Answer Area

```
productIdList = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
index = 0

[ while / for / if / break ] (index < 10) :
    print(productIdList[index])

    if productIdList[index] == 6 :
        [ while / for / if / break ]
    else :
```

Correct Answer:

Answer Area

```
productIdList = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
index = 0

[while / for / if / break] (index < 10) :
    print(productIdList[index])
    if productIdList[index] == 6 :
        [while / for / if / break]
    else :
```

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

---

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.

Hot Area:

Answer Area

```
#  ABC      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 [ ▼ ]
        days_rented +-1

if day_rented [ ▼ ]
    total = (days_rented * cost_per_day) * .7

elif day_rented [ ▼ ]
    total = (days_rented * cost_per_day) * .5

  else:

     total = days_rented * cost_per_day

  print("Cost of the DVD rental is : $", total)
```

- != "n":
- == "n":
- == "y":

- == "Sunday ":
- >= "Sunday ":
- is " Sunday ":

- == "Thursday":
- <= "Thursday":
- is "Thursday":

Correct Answer:

Answer Area

```
#  ABC      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 [ != "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 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?

A. totalItems = input("How many items would you like?")

B. totalItems = float(input("How many items would you like?"))

C. totalItems = str(input("How many items would you like?"))

D. totalItems = int(input("How many items would you like?"))

Correct Answer: B

References: http://anh.cs.luc.edu/python/hands-on/3.1/handsonHtml/io.html

---

QUESTION 8

HOTSPOT

The ABC 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.

Hot Area:

Answer Area

```
sum = count = done = 0
average = 0.0

while (done != -1):

    rating =

if rating == -1:
    break
sum+=rating
count+=1
```

- print("Enter next rating (1-5), -1 for done")
- float(input("Enter next rating (1-5), -1 for done"))
- input("Enter next rating (1-5), -1 for done")
- input "Enter next rating (1-5), -1 for done")

```
average = float(sum/count)
```

- output("The average star rating for NetVerZleep coffee is: "
- console.input("The average star rating for the new coffee is: "
- printline("The average star rating for the new coffee is: "
- print("The average star rating for the new coffee is: "

+

- format(average, '.2f'))
- format(average, '.2d'))
- {average, '.2f'}
- format.average.{2d}

Correct Answer:

Answer Area

```
sum = count = done = 0
average = 0.0

while (done != -1):

    rating =

if rating == -1:
    break
sum+=rating
count+=1
```

- print("Enter next rating (1-5), -1 for done")
- float(input("Enter next rating (1-5), -1 for done")) ✓
- input("Enter next rating (1-5), -1 for done")
- input "Enter next rating (1-5), -1 for done")

```
average = float(sum/count)
```

- output("The average star rating for NetVerZleep coffee is: "
- console.input("The average star rating for the new coffee is: "
- printline("The average star rating for the new coffee is: "
- print("The average star rating for the new coffee is: " ✓

+

- format(average, '.2f')) ✓
- format(average, '.2d'))
- {average, '.2f'}
- format.average.{2d}

References: https://www.w3resource.com/python/python-format.php#num

---

QUESTION 9

HOTSPOT

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.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Which code segment should you use at line 03?

- while (index < 10) :
- while [index < 10]
- while (index < 5) :
- while [index < 5]

Which code segment should you use at line 06?

- if numbers[index] == 6
- if numbers[index] == 6 :
- if numbers(index) = 6 :
- if numbers(index) != 6

Correct Answer:

Answer Area

Which code segment should you use at line 03?

- while (index < 10) :
- while [index < 10]
- while (index < 5) :
- while [index < 5]

Which code segment should you use at line 06?

- if numbers[index] == 6
- if numbers[index] == 6 :
- if numbers(index) = 6 :
- if numbers(index) != 6

QUESTION 10

HOTSPOT

You are developing a Python application for your company.

You write the following code:

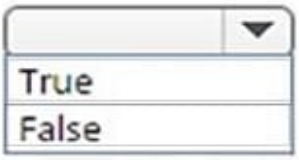
```
numList = [1,2,3,4,5]
alphaList = ["a","b","c","d","e"]
print(numList is alphaList)
print(numList == alphaList)
numList = alphaList
print(numList is alphaList)
print(numList == alphaList)
```

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

Hot Area:

Answer Area

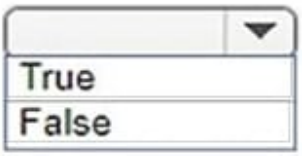
What is displayed after the first print?



What is displayed after the second print?

What is displayed after the third print?

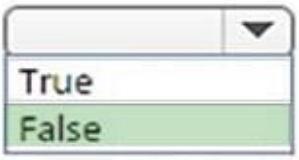
What is displayed after the fourth print?



Correct Answer:

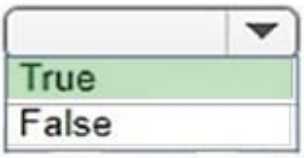
Answer Area

What is displayed after the first print?



What is displayed after the second print?

What is displayed after the third print?



What is displayed after the fourth print?

QUESTION 11

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 =
```

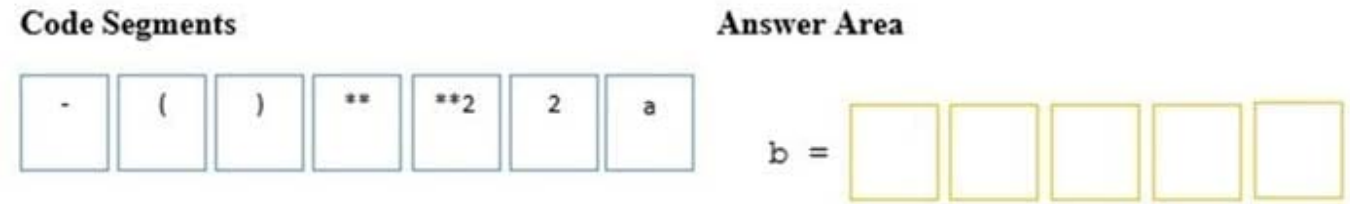
You need to ensure that the result is correct.

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

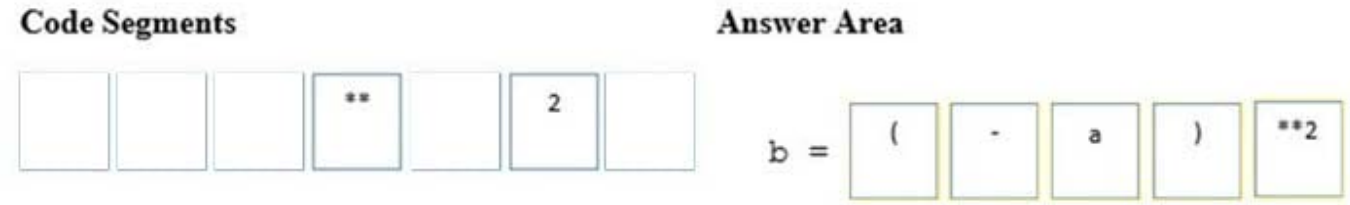
scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:



Correct Answer:



QUESTION 12

HOTSPOT

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.

Hot Area:

Answer Area

Which two data types are stored in the `rooms` list at line 01?

- bool and string
- float and bool
- int and string
- float and int

What is the data type of `room` at line 02?

- bool
- float
- int
- string

Why does line 03 fail to find the rooms?

- Invalid syntax
- Mismatched data type(s)
- Misnamed variable(s)

Correct Answer:

Answer Area

Which two data types are stored in the `rooms` list at line 01?

- bool and string
- float and bool
- **int and string**
- float and int

What is the data type of `room` at line 02?

- bool
- float
- int
- **string**

Why does line 03 fail to find the rooms?

- **Invalid syntax**
- Mismatched data type(s)
- Misnamed variable(s)