



Question 1 (of 40)

- Review later
- Comment later

Time remaining 00:31:25

Overall exam progress (1 of 40 total questions)

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?

.....

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



Question 2 (of 40)

- Review later
- Comment later

Time remaining 00:31:16

Overall exam progress (2 of 40 total questions)

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?

- b*c
- a+b
- b*c**
- c-d

Which operation will be evaluated second?

Which expression is equivalent to the expression in the function?

(a + (b*c)) - d



Question 2 (of 40)

- Review later
- Comment later

Time remaining 00:31:08

Overall exam progress (2 of 40 total questions)

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?

b*c ▾

Which operation will be evaluated second?

addition ▾

addition

subtraction

(a + b) * c

Which expression is equivalent to the expression in the function?

...



Question 2 (of 40)

- Review later
- Comment later

Time remaining 00:31:02

Overall exam progress (2 of 40 total questions)

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?

b*c

Which operation will be evaluated second?

addition

Which expression is equivalent to the expression in the function?

(a + (b*c)) - d
(a+b) * (c-d)
(a + (b*c)) - d
a + ((b * c) - d)



Question 3 (of 40)

- Review later
- Comment later

Time remaining 00:30:54

Overall exam progress (3 of 40 total questions)

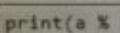
You are writing a Python program to perform arithmetic operations.

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

 <code>print(a / b)</code>	 <code>print(a // b)</code>
 <code>print(a % b)</code>	

Answer Area

2	<input type="text"/>
3	<input type="text"/>
2.75	<input type="text"/>



Question 4 (of 40)

- Review later
- Comment later

Time remaining 00:30:48

Overall exam progress (4 of 40 total questions)

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.

• • • •

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



Question 4 (of 40)

- Review later
- Comment later

Time remaining 00:29:53

Overall exam progress (4 of 40 total questions)

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?



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



Question 5 (of 40)

- Review later
- Comment later

Time remaining 00:30:34

Overall exam progress (5 of 40 total questions)

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.

• • • • •

Answer Area

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

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

Why does line 03 fail to find the `rooms`?

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



Question 5 (of 40)

- Review later
- Comment later

Time remaining 00:30:01

Overall exam progress (5 of 40 total questions)

```
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?

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

Why does line 03 fail to find the `rooms`?



Question 5 (of 40)

- Review later
- Comment later

Time remaining 00:30:21

Overall exam progress (5 of 40 total questions)

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.

• • • • •

Answer Area

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

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

Why does line 03 fail to find the rooms?



Question 5 (of 40)

- Review later
- Comment later

Time remaining 00:30:28

Overall exam progress (5 of 40 total questions)

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.

• • • •

Answer Area

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

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

- bool
- float
- int
- string

Why does line 03 fail to find the rooms?



Question 6 (of 40)

- Review later
- Comment later

Time remaining 00:30:12

Overall exam progress (6 of 40 total questions)

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

Addition and Subtraction

Exponents

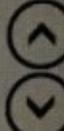
And

Multiplication and Division

Unary positive, negative, not

Parenthesis

Answer Area





Question 7 (of 40)

- Review later
- Comment later

Time remaining 00:39:09

Overall exam progress (7 of 40 total questions)

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
```

Answer Area

Yes

No



After executing code segment 1, the data type of variable `a` is `str`.



After executing code segment 2, the data type of variable `b` is `float`.



Question 7 (of 40)

- Review later
- Comment later

Time remaining 00:28:44

Overall exam progress (7 of 40 total questions)

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.

NOTE: Each correct selection is worth one point.





Question 7 (of 40)

- Review later
- Comment later

Time remaining 00:28:22

Overall exam progress (7 of 40 total questions)

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
```



Answer Area

Yes

No



After executing code segment 1, the data type of variable a is str.



After executing code segment 2, the data type of variable b is float.



After executing code segment 3, the data type of variable c is int.



Question 8 (of 40)

- Review later
- Comment later

Time remaining 00:20:01

Overall exam progress (8 of 40 total questions)

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 word in word_list:  
        if letter == word[0]:  
            count += 1  
    return count
```



Question 8 (of 40)

- Review later
- Comment later

Time remaining 00:20:01

Overall exam progress (8 of 40 total questions)

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 word in word_list:  
        if letter == word:  
            count += 1  
    return count
```



Question 8 (of 40)

- Review later
- Comment later

Time remaining 00:27:52

Overall exam progress (8 of 40 total questions)

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  
        if  
            count += 1  
    return count
```



Question 8 (of 40)

- Review later
- Comment later

Time remaining 00:27:52

Overall exam progress (8 of 40 total questions)

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 word in word_list:  
        if letter == word:  
            count += 1  
    return count
```





Question 8 (of 40)

- Review later
- Comment later

Time remaining 00:27:45

Overall exam progress (8 of 40 total questions)

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

```
count = 0
for 
    if 
        count += 1
    return count

word_list = []
# word_list is populated from a 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)
```



Question 8 (of 40)

- Review later
- Comment later

Time remaining 00:20:11

Overall exam progress (8 of 40 total questions)

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
```

```
        word in word:
```

```
            if word in word_list:
```

```
                word == word_list:
```

```
                word is word_list:
```



Question 8 (of 40)

- Review later
- Comment later

Time remaining 00:20:11

Overall exam progress (8 of 40 total questions)

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
```

```
        word in word:
```

```
            word in word_list:
```

```
                word == word_list:
```

```
                    word is word_list:
```



Question 8 (of 40)

- Review later
- Comment later

Time remaining 00:39:02

Overall exam progress (8 of 40 total questions)

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 [REDACTED]  
        if [REDACTED]  
            count += 1  
    return count
```



Question 9 (of 40)

- Review later
- Comment later

Time remaining 00:27:25

Overall exam progress (9 of 40 total questions)

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.

• • • • •

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





Question 9 (of 40)

- Review later
- Comment later

Time remaining 00:38:56

Overall exam progress (9 of 40 total questions)

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.

• • • •

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



Question 10 (of 40)

- Review later
- Comment later

Time remaining 00:26:45

Overall exam progress (10 of 40 total questions)

Answer Area

```
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) * 0.7

elif day_rented:
    total = (days_rented * cost_per_day) * 0.5

else:
    total = days_rented * cost_per_day

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



Question 10 (of 40)

- Review later
- Comment later

Time remaining 00:26:51

Overall exam progress (10 of 40 total questions)

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
    days_rented +=1

if day_rented
    total = (days_rented * cost_per_day) * 0.7

elif day_rented
    total = (days_rented * cost_per_day) * 0.5
```



Question 10 (of 40)

- Review later
- Comment later

Time remaining 00:27:07

Overall exam progress (10 of 40 total questions)

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?"))
```



Question 11 (of 40)

- Review later
- Comment later

Time remaining 00:20:54

Overall exam progress (11 of 40 total questions)

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 =  (input("Enter the distance traveled in feet"))

distance_miles = distance/5280 #convert to miles

time =  (input("Enter the time elapsed in seconds"))
int
float
str
time_hours = 600 #convert to hours

velocity = distance_miles/time_hours

print("The average velocity is : ", velocity, " miles/hour")
```



Question 11 (of 40)

- Review later
- Comment later

Time remaining 00:26:26

Overall exam progress (11 of 40 total questions)

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 =           ▼ (input("Enter the distance traveled in feet"))
distance_miles = distance/5280  #convert to miles

time =               ▼ (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")
```



Question 11 (of 40)

- Review later
- Comment later

Time remaining 00:21:00

Overall exam progress (11 of 40 total questions)

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 = [ ] (input("Enter the distance traveled in feet"))
int
distance_miles = distance/5280 #convert to miles
str
float

time = [ ] (input("Enter the time elapsed in seconds"))
int
time_hours = time/3600 #convert to hours
str
float

velocity = distance_miles/time_hours
float

print("The average velocity is : ", velocity, " miles/hour")
str
```



Question 12 (of 40)

- Review later
- Comment later

Time remaining 00:26:17

Overall exam progress (12 of 40 total questions)

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

Answer Area

`type(+1E10)`

`type(5.0)`

`type("True")`

`type(False)`





Question 13 (of 40)

- Review later
- Comment later

Time remaining 00:26:10

Overall exam progress (13 of 40 total questions)

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

Question 14 (of 40)

- Review later
- Comment later

Time remaining 00:25:44

Overall exam progress (14 of 40 total questions)

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

bool	float	int	str
------	-------	-----	-----

Answer Area

age = 2
minor = False
name = "Contoso"
weight = 123.5
.....



Question 14 (of 40)

- Review later
- Comment later

Time remaining 00:25:29

Overall exam progress (14 of 40 total questions)

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

Answer Area

age = 2
 minor = False
 name = "Contoso"
 weight = 123.5
 zip = "81000"



Question 15 (of 40)

- Review later
- Comment later

Time remaining 00:25:07

Overall exam progress (15 of 40 total questions)

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.

Code Segments

-	()	**	**2	2	a
---	---	---	----	-----	---	---

Answer Area

...
-----	-----	-----	-----	-----

b =

--	--	--	--	--



Question 16 (of 40)

- Review later
 - Comment later

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.

— 5 —

Answer Area

What is displayed after the first print?

True
False

What is displayed after the second print?

卷之三

What is displayed after the third print?

◀

What is displayed after the fourth print?



Question 16 (of 40)

- Review later
- Comment later

Time remaining 00:21:38

Overall exam progress (16 of 40 total questions)

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.

Answer Area



What is displayed after the first print?

What is displayed after the second print?

What is displayed after the third print?

False

What is displayed after the fourth print?

True



Question 16 (of 40)

- Review later
- Comment later

Time remaining 00:21:44

Overall exam progress (16 of 40 total questions)

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.

• • • •

Answer Area

What is displayed after the first print?

What is displayed after the second print?

What is displayed after the third print?

True
False

What is displayed after the fourth print?



Question 16 (of 40)

- Review later
- Comment later

Time remaining 00:21:51

Overall exam progress (16 of 40 total questions)

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.

• • • •

Answer Area

What is displayed after the first print?

What is displayed after the second print?

True
False

What is displayed after the third print?

What is displayed after the fourth print?



Question 16 (of 40)

- Review later
- Comment later

Time remaining 00:24:37

Overall exam progress (16 of 40 total questions)

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.

...

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 17 (of 40)

- Review later
- Comment later

Time remaining 00:24:10

Overall exam progress (17 of 40 total questions)

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.

• • • • •

- A. `math.frexp(x)`
- B. `math.fmod(x)`
- C. `math.floor(x)`
- D. `math.ceil(x)`
- E. `mathfabs(x)`



Question 18 (of 40)

- Review later
- Comment later

Time remaining 00:23:57

Overall exam progress (18 of 40 total questions)

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?

• • • •

- A. `import math.sqrt as squareRoot`
- B. `from math import sqrt as squareRoot`
- C. `import sqrt from math as squareRoot`
- D. `from math.sqrt as squareRoot`



Question 19 (of 40)

- Review later
- Comment later

Time remaining 00:23:47

Overall exam progress (19 of 40 total questions)

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.

• • • •

- A. `random.randrange(5, 11, 1)`
- B. `random.randint(5, 11)`
- C. `random.randint(5, 12)`
- D. `random.randrange(5, 12, 1)`



Question 20 (of 40)

- Review later
- Comment later

Time remaining 00:23:23

Overall exam progress (20 of 40 total questions)

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
05
06
07
```

Answer Area



Yes No

Lines 01 through 04 will be ignored for syntax checking.

The pound sign (#) is optional for lines 02 and 03.

The string in line 06 will be interpreted as a comment.

Line 07 contains an inline comment.





Question 20 (of 40)

- Review later
- Comment later

Time remaining 00:23:34

Overall exam progress (20 of 40 total questions)

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.



Answer Area

Lines 01 through 04 will be ignored for syntax checking.

The pound-sign (#) is optional for lines 02 and 03.





Question 21 (of 40)

- Review later
- Comment later

Time remaining 00:22:53

Overall exam progress (21 of 40 total questions)

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
06     return calories
```



- 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):



Question 21 (of 40)

- Review later
- Comment later

Time remaining 00:23:09

Overall exam progress (21 of 40 total questions)

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 name = input("What is your name? ")
02 return name
03
04
05 calories = miles * calories_per_mile
06 return calories
07
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.



- A. 01 def get_name():
- B. 01 def get_name(biker):



Question 22 (of 40)

- Review later
- Comment later

Time remaining 00:22:40

Overall exam progress (22 of 40 total questions)

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 inside of parentheses 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 after the # sign on any line.





Question 23 (of 40)

- Review later
- Comment later

Time remaining 00:18:33

Overall exam progress (23 of 40 total questions)

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

```
update_score
def update_score
    return update_score
```



Question 23 (of 40)

- Review later
- Comment later

Time remaining 00:18:27

Overall exam progress (23 of 40 total questions)

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

A screenshot of a code editor window. On the left, there is a scroll bar. The main area contains the following Python code:

```
def update_score(current, value):
    current += value
    return current
```

The variable `current` is highlighted with a yellow selection rectangle. The variable `value` is also highlighted with a yellow selection rectangle. The code editor has a light gray background with dark gray horizontal and vertical scroll bars.



Question 23 (of 40)

- Review later
- Comment later

Time remaining 00:18:22

Overall exam progress (23 of 40 total questions)

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

```
current += value
```

A screenshot of a code editor interface. A dropdown menu is open, showing several code snippets. The snippet "return current" is highlighted with a yellow background, indicating it is selected or being considered for completion.

```
pass current
return current
return
pass
```



Question 24 (of 40)

- Review later
- Comment later

Time remaining 00:18:13

Overall exam progress (24 of 40 total questions)

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.

A try statement can have a finally clause without an except clause.

A try statement can have a finally clause and an except clause.

A try statement can have one or more finally clauses.



Question 25 (of 40)

- Review later
- Comment later

Time remaining 00:17:53

Overall exam progress (25 of 40 total questions)

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.

Answer Area

Which code segment should you use at line 03?

while index < 10;
while index < 10;



Question 25 (of 40)

- Review later
- Comment later

Time remaining 00:17:37

Overall exam progress (25 of 40 total questions)

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
```

Answer Area

.....

Which code segment should you use at line 03?

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 26 (of 40)

- Review later
- Comment later

Time remaining 00:17:00

Overall exam progress (26 of 40 total questions)

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, end='')
```



- 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.



Question 26 (of 40)

- Review later
- Comment later

Time remaining 00:17:16

Overall exam progress (26 of 40 total questions)

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.



Question 27 (of 40)

- Review later
- Comment later

Time remaining 00:16:25

Overall exam progress (27 of 40 total questions)

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 as

.....

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



Question 27 (of 40)

- Review later
- Comment later

Time remaining 00:16:40

Overall exam progress (27 of 40 total questions)

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.



A. Line 01

B. Line 02



Question 28 (of 40)

- Review later
- Comment later

Time remaining 00:15:20

Overall exam progress (28 of 40 total questions)

Answer Area

```
name = input("what is your name?")  
score = 0  
count = 0  
sum = 0  
  
while (score != -1):  
    score = int(input("Enter your scores: (-1 to end)"))  
    if score == -1:  
        break  
    sum += score  
    count += 1  
average = sum / count  
print("Your average score is: %f" %average)
```

Question 28 (of 40)

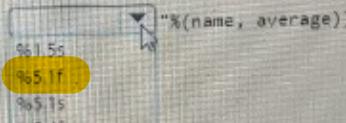
- Review later
- Comment later

Time remaining 00:15:12

Overall exam progress (28 of 40 total questions)

Answer Area

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





Question 28 (of 40)

- Review later
- Comment later

Time remaining 00:15:34

Overall exam progress (28 of 40 total questions)

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 user's 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
```



Question 29 (of 40)

- Review later
- Comment later

Time remaining 00:15:04

Overall exam progress (29 of 40 total questions)

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", "w+")`
- C. `open("local_data", "w")`
- D. `open("local_data", "r")`



Question 30 (of 40)

- Review later
- Comment later

Time remaining 00:14:58

Overall exam progress (30 of 40 total questions)

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?

.....

- A. name = input
- B. input(name)
- C. name = input()
- D. input("name")



Question 31 (of 40)

- Review later
- Comment later

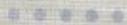
Time remaining 00:14:18

Overall exam progress (31 of 40 total questions)

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



Question 31 (of 40)

- Review later
- Comment later

Time remaining 00:14:37

Overall exam progress (31 of 40 total questions)

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     print(line)  
07
```



Question 32 (of 40)

- Review later
- Comment later

Time remaining 00:13:50

Overall exam progress (32 of 40 total questions)

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

```
with open(filename, 'r') as file:
    ...
return None
return file.readline()
if os.path.isfile(filename):
    ...
else:
```

Answer Area





Question 33 (of 40)

- Review later
- Comment later

Time remaining 00:13:10

Overall exam progress (33 of 40 total questions)

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

```
rating =   
  
if rating == -1:  
    break  
sum += rating  
count += 1  
  
average = float(sum / count)
```

```
format(average, '2f'))  
format(average, '2d'))
```



Question 33 (of 40)

- Review later
- Comment later

Time remaining 00:13:18

Overall exam progress (33 of 40 total questions)

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

```
rating =  
  
    if rating == -1:  
        break  
    sum += rating  
    count += 1  
  
average = float(sum / count)
```

output("The average star rating for the new coffee is: ")



Question 33 (of 40)

- Review later
- Comment later

Time remaining 00:13:26

Overall exam progress (33 of 40 total questions)

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 =
        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")
    sum += rating
```



Question 34 (of 40)

- Review later
- Comment later

Time remaining 00:12:24

Overall exam progress (34 of 40 total questions)

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

```
p = 2
while p <= 100:
    is_prime = True
```

```
break
```

```
p = p + 1
```

```
for i in range(2, p):
```

```
p = 2
is_prime = True
while p <= 100:
```

```
continue
```

```
for i in range(2, p):
    if p / i == 0:
        is_prime = False
```

Answer Area

```
-----
```

```
-----
```

```
-----
```

```
if is_prime == True:
```

```
-----
```



Question 34 (of 40)

- Review later
- Comment later

Time remaining 00:12:14

Overall exam progress (34 of 40 total questions)

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.

while p <= 100:
 is_prime = True

break

p = p + 1

for i in range(2, p):
 if p % i == 0:
 is_prime = False

is_prime = True
while p <= 100:

continue

for i in range(2, p):
 if p / i == 0:
 is_prime = False

Answer Area

if is_prime == True:
 print(p)

Question 35 (of 40)

- Review later
- Comment later

Time remaining 00:11:42

Overall exam progress (35 of 40 total questions)

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"))  
  
if grade <= 90:  
    print("Your letter grade is A")  
else:  
    print("Your letter grade is B")
```



Question 35 (of 40)

- Review later
- Comment later

Time remaining 00:11:15

Overall exam progress (35 of 40 total questions)

Answer Area

• • • •

```
#Letter Grade Converter
```

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

```
letter_grade = 'A'
```

```
if grade > 80:  
if grade >= 80:  
elif grade > 80:  
elif grade >= 80:
```

```
letter_grade = 'D'  
else:  
    letter_grade = 'F'
```

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



Question 35 (of 40)

- Review later
- Comment later

Time remaining 00:10:57

Overall exam progress (35 of 40 total questions)

Answer Area

```
#Letter Grade Converter

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

letter_grade = 'A'

letter_grade = 'B'

if grade > 70:
if grade >= 70:
elif grade > 70:
elif grade >= 70:
else:
    letter_grade = 'F'

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



Question 35 (of 40)

- Review later
- Comment later

Time remaining 00:10:49

Overall exam progress (35 of 40 total questions)

Answer Area

• • • •

```
#Letter Grade Converter  
  
grade = int(input("Enter a numeric grade"))
```

```
letter_grade = 'A'
```

```
letter_grade = 'B'
```

```
letter_grade = 'C'
```

```
if grade > 65:  
if grade >= 65:  
elif grade > 65:  
elif grade >= 65:
```

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



Question 35 (of 40)

- Review later
- Comment later

Time remaining 00:10:35

Overall exam progress (35 of 40 total questions)

Answer Area

• • • •

```
#Letter Grade Converter

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

letter_grade = 'A'
letter_grade = 'B'
letter_grade = 'C'
letter_grade = 'D'

else:
    letter_grade = 'F'

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



Question 36 (of 40)

- Review later
- Comment later

Time remaining 00:10:20

Overall exam progress (36 of 40 total questions)

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

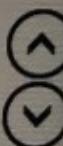
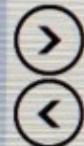
Which four code segments should you use to develop the solution? To answer, move the appropriate code segment from the list of code segments to the answer area and arrange them in the correct order.



Code Segments

```
if name.lower() == name:  
    print(name, "is all lower case.")  
  
name = input("Enter your name: ")  
  
else:  
    print(name, "is lower case.")  
  
elif name.upper() == name:  
    print(name, "is all upper case.")  
  
else:  
    print(name, "is mixed case.")  
  
else:  
    print(name, "is upper case.")
```

Answer Area





Question 37 (of 40)

- Review later
- Comment later

Time remaining 00:10:01

Overall exam progress (37 of 40 total questions)

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



Question 37 (of 40)

- Review later
- Comment later

Time remaining 00:09:52

Overall exam progress (37 of 40 total questions)

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
```

```
    ▾ (index < 10) :
```

```
        print(productIdList[index])
```

```
        if productIdList[index] == 6 :
```

```
            while
            else
                for
                if
                    break
```



Question 37 (of 40)

- Review later
- Comment later

Time remaining 00:09:48

Overall exam progress (37 of 40 total questions)

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

```
index = 0
    (index < 10) :
        print(productIdList[index])
        if productIdList[index] == 6 :
            continue
        else :
```

 continue



Question 38 (of 40)

- Review later
- Comment later

Time remaining 00:09:13

Overall exam progress (38 of 40 total questions)

Answer Area

```
def safe_root(a, b):  
    answer = a ** (1 / b)  
  
    if a >= 0:  
        f = a % 2 == 0  
    else:  
        elif f == 1:  
            answer = "Result is an imaginary number"  
  
    answer = -(-a) ** (1 / b)  
  
    return answer
```



Question 38 (of 40)

- Review later
- Comment later

Time remaining 00:09:07

Overall exam progress (38 of 40 total questions)

Answer Area

```
def safe_root(a, b):
```

```
    answer = a ** (1 / b)
```

```
    if a <= 0:
```

```
        if a % 2 == 0:
```

```
            else:
```

```
        elif:
```

number"

```
    answer = -(-a) ** (1 / b)
```

```
return answer
```

Question 38 (of 40)

- Review later
- Comment later

Time remaining 00:09:01

Overall exam progress (38 of 40 total questions)

Answer Area

```
def safe_root(a, b):  
    answer = a ** (1 / b)  
  
    if a >= 0:  
        if a % 2 == 0:  
            else:  
                elif:  
                    return answer  
    answer + "Result is an imaginary number"
```

Question 38 (of 40)

- Review later
- Comment later

Time remaining 00:09:30

Overall exam progress (38 of 40 total questions)

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):
```

```
    if a >= 0:  
        if a % 2 == 0:  
            else:  
                elif:
```



Question 39 (of 40)

- Review later
- Comment later

Time remaining 00:08:31

Overall exam progress (39 of 40 total questions)

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

```
employee_number = ""  
employee_number = "sentinel"
```

```
employee_number = input("Enter employee number (ddd-dd-dddd): ")  
parts = employee_number.split('-')
```



Question 39 (of 40)

- Review later
- Comment later

Time remaining 00:08:26

Overall exam progress (39 of 40 total questions)

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

```
parts = ""  
  
while employee_number != "":  
    while employee_number != "sentinel":  
  
        employee_number = input("Enter employee number (ddd-dd-dddd): ")  
  
        parts = employee_number.split('-')
```



Question 39 (of 40)

- Review later
- Comment later

Time remaining 00:08:19

Overall exam progress (39 of 40 total questions)

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

```
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():

            valid = True
            print(valid)
```

valid = False
valid = True



Question 40 (of 40)

- Review later
- Comment later

Time remaining 00:07:42

Overall exam progress (40 of 40 total questions)

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.

Answer Area

```
def get_rating(age):
    rating = ""
    if
        elif
        elif
    else
        return age < 13:rating = "C"
        return age < 18:rating = "T"
```



Question 40 (of 40)

- Review later
- Comment later

Time remaining 00:07:55

Overall exam progress (40 of 40 total questions)

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.

Answer Area

```
def get_rating(age):
    rating = ""
    if
        elif age < 13: rating = "C"
        elif age < 18: rating = "T"
        ...
```