Python-Institute

Exam Questions PCEP-30-02

PCEP - Certified Entry-Level Python Programmer

NEW QUESTION 1
What is the expected output of the following code?

```
equals = 0
for i in range(2):
    for j in range(2):
        if i == j:
            equals += 1
else:
    equals += 1
print(equals)
```

A. The code outputs nothing.
B. 3
C. 1
D. 4

Answer: C

Explanation:
The code snippet that you have sent is checking if two numbers are equal and printing the result. The code is as follows:
num1 = 1 num2 = 2 if num1 == num2: print(4) else: print(1)
The code starts with assigning the values 1 and 2 to the variables ??num1?? and ??num2?? respectively. Then, it enters an if statement that compares the values of ??num1?? and ??num2?? using the equality operator (==). If the values are equal, the code prints 4 to the screen. If the values are not equal, the code prints 1 to the screen.
The expected output of the code is 1, because the values of ??num1?? and ??num2?? are not equal. Therefore, the correct answer is C. 1.
Reference: [Python Institute - Entry-Level Python Programmer Certification]

NEW QUESTION 2
What happens when the user runs the following code?

```
speed = 0
while speed < 30:
    speed *= 2
    if speed > 10:
        continue
    print("*", end="")
else:
    print("*")
```

A. The program outputs three asterisks (***)to the screen.
B. The program outputs one asterisk (*) to the screen.
C. The program outputs five asterisks (*****) to the screen.
D. The program enters an infinite loop.

Answer: D

Explanation:
The code snippet that you have sent is a while loop with an if statement and a print statement inside it. The code is as follows:
while True: if counter < 0: print(????) else: print(??**??)
The code starts with entering a while loop that repeats indefinitely, because the condition ??True?? is always true. Inside the loop, the code checks if the value of ??counter?? is less than 1. If yes, it prints a single asterisk () to the screen. If no, it prints three asterisks (**) to the screen. However, the code does not change the value of ??counter?? inside the loop, so the same condition is checked over and over again. The loop never ends, and the code enters an infinite loop.
The program outputs either one asterisk () or three asterisks (**) to the screen repeatedly, depending on the initial value of ??counter??. Therefore, the correct answer is D. The program enters an infinite loop.
Reference: [Python Institute - Entry-Level Python Programmer Certification]

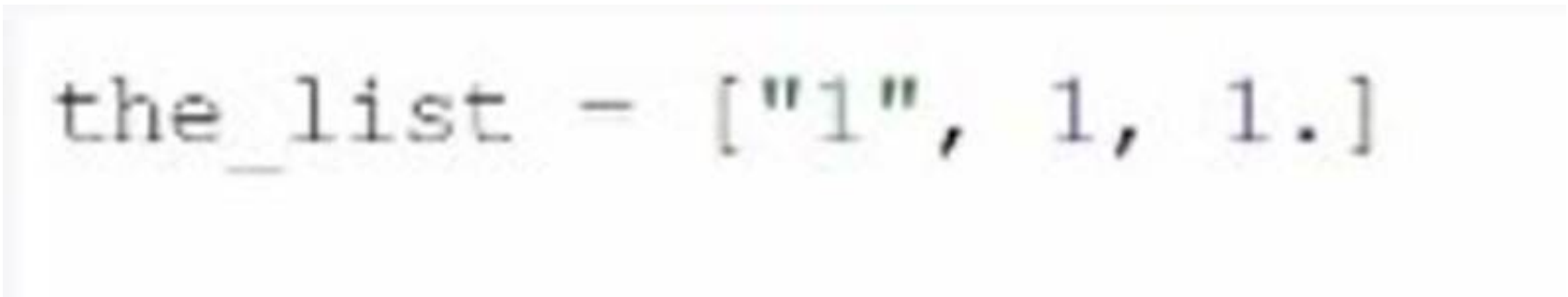
NEW QUESTION 3
Which of the following are the names of Python passing argument styles? (Select two answers.)

A. keyword
B. reference
C. indicatory
D. positional

Answer: AD

Explanation:
Keyword arguments are arguments that are specified by using the name of the parameter, followed by an equal sign and the value of the argument. For example, print (sep='-', end='!') is a function call with keyword arguments. Keyword arguments can be used to pass arguments in any order, and to provide default values for some arguments1.
Positional arguments are arguments that are passed in the same order as the parameters of the function definition. For example, print ('Hello', 'World') is a function call with positional arguments. Positional arguments must be passed before any keyword arguments, and they must match the number and type of the parameters of the function2.
References: 1: 5 Types of Arguments in Python Function Definitions | Built In 2: python - What??s the pythonic way to pass arguments between functions ??

NEW QUESTION 4
Assuming that the following assignment has been successfully executed:



Which of the following expressions evaluate to True? (Select two expressions.)

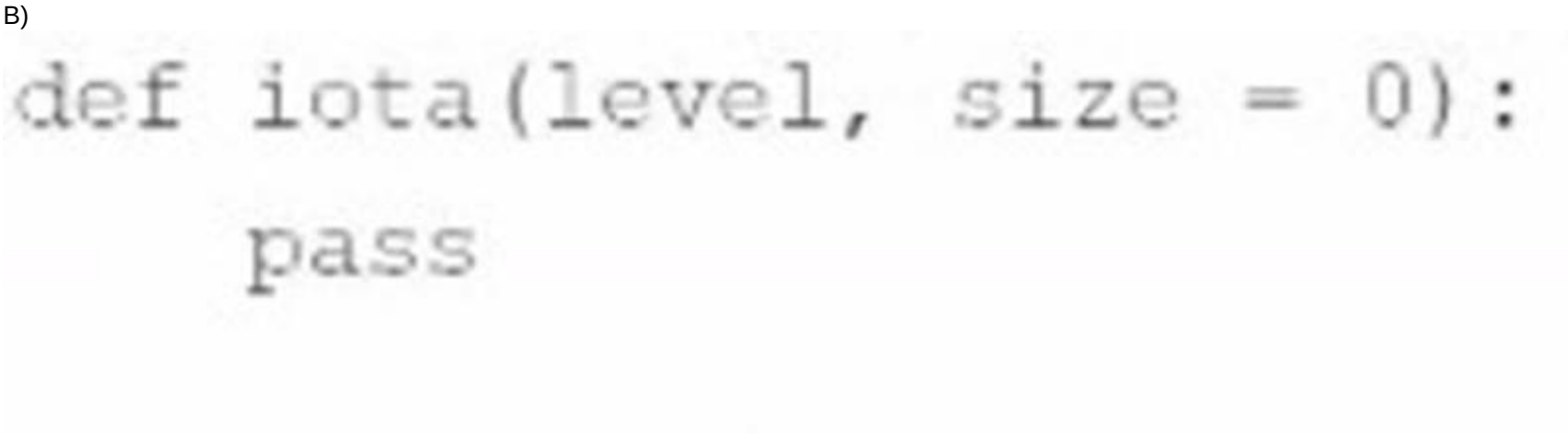
A. the_List.index {"1"} in the_list
B. 1.1 in the_list |1:3 |
C. len (the list [0:2]} <3
D. the_lis
E. index {'1'} -- 0

Answer: CD

Explanation:
The code snippet that you have sent is assigning a list of four values to a variable called ??the_list??. The code is as follows:
the_list = [??1??, 1, 1, 1]
The code creates a list object that contains the values ??1??, 1, 1, and 1, and assigns it to the variable ??the_list??. The list can be accessed by using the variable name or by using the index of the values. The index starts from 0 for the first value and goes up to the length of the list minus one for the last value. The index can also be negative, in which case it counts from the end of the list. For example, the_list[0] returns ??1??, and the_list[-1] returns 1.
The expressions that you have given are trying to evaluate some conditions on the list and return a boolean value, either True or False. Some of them are valid, and some of them are invalid and will raise an exception. An exception is an error that occurs when the code cannot be executed properly. The expressions are as follows:
* A. the_List.index {??1??} in the_list: This expression is trying to check if the index of the value ??1?? in the list is also a value in the list. However, this expression is invalid, because it uses curly brackets instead of parentheses to call the index method. The index method is used to return the first occurrence of a value in a list. For example, the_list.index(??1??) returns 0, because ??1?? is the first value in the list. However, the_list.index {??1??} will raise a SyntaxError exception and output nothing.
* B. 1.1 in the_list |1:3 |: This expression is trying to check if the value 1.1 is present in a sublist of the list. However, this expression is invalid, because it uses a vertical bar instead of a colon to specify the start and end index of the sublist. The sublist is obtained by using the slicing operation, which uses square brackets and a colon to get a part of the list. For example, the_list[1:3] returns [1, 1], which is the sublist of the list from the index 1 to the index 3, excluding the end index. However, the_list |1:3 | will raise a SyntaxError exception and output nothing.
* C. len (the list [0:2]} <3: This expression is trying to check if the length of a sublist of the list is less than 3. This expression is valid, because it uses the len function and the slicing operation correctly. The len function is used to return the number of values in a list or a sublist. For example, len(the_list) returns 4, because the list has four values. The slicing operation is used to get a part of the list by using square brackets and a colon. For example, the_list[0:2] returns [??1??, 1], which is the sublist of the list from the index 0 to the index 2, excluding the end index. The expression len (the list [0:2]} <3 returns True, because the length of the sublist [??1??, 1] is 2, which is less than 3.
* D. the_list. index {??1??} – 0: This expression is trying to check if the index of the value ??1?? in the list is equal to 0. This expression is valid, because it uses the index method and the equality operator correctly. The index method is used to return the first occurrence of a value in a list. For example, the_list.index(??1??) returns 0, because ??1?? is the first value in the list. The equality operator is used to compare two values and return True if they are equal, or False if they are not. For example, 0 == 0 returns True, and 0 == 1 returns False. The expression the_list. index {??1??} – 0 returns True, because the index of ??1?? in the list is 0, and 0 is equal to 0.
Therefore, the correct answers are C. len (the list [0:2]} <3 and D. the_list. index {??1??} – 0. Reference: Python List Methods - W3Schools5. Data Structures — Python 3.11.5 documentationList methods in Python - GeeksforGeeks

NEW QUESTION 5
Which of the following functions can be invoked with two arguments?
A)

B)



C)

```
def kappa(level):
    pass
```

D)

```
def lambda():
    pass
```

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

Answer: B

Explanation:
The code snippets that you have sent are defining four different functions in Python. A function is a block of code that performs a specific task and can be reused in the program. A function can take zero or more arguments, which are values that are passed to the function when it is called. A function can also return a value or None, which is the default return value in Python.
To define a function in Python, you use the def keyword, followed by the name of the function and parentheses. Inside the parentheses, you can specify the names of the parameters that the function will accept. After the parentheses, you use a colon and then indent the code block that contains the statements of the function. For example:
def function_name(parameter1, parameter2): # statements of the function return value To call a function in Python, you use the name of the function followed by parentheses.
Inside the parentheses, you can pass the values for the arguments that the function expects. The number and order of the arguments must match the number and order of the parameters in the function definition, unless you use keyword arguments or default values. For example:
function_name(argument1, argument2)
The code snippets that you have sent are as follows:
A) def my_function(): print(??Hello??)
B) def my_function(a, b): return a + b
C) def my_function(a, b, c): return a * b * c
D) def my_function(a, b=0): return a - b
The question is asking which of these functions can be invoked with two arguments. This means that the function must have two parameters in its definition, or one parameter with a default value and one without. The default value is a value that is assigned to a parameter if no argument is given for it when the function is called. For example, in option D, the parameter b has a default value of 0, so the function can be called with one or two arguments.
The only option that meets this criterion is option B. The function in option B has two parameters, a and b, and returns the sum of them. This function can be invoked with two arguments, such as my_function(2, 3), which will return 5.
The other options cannot be invoked with two arguments. Option A has no parameters, so it can only be called with no arguments, such as my_function(), which will print ??Hello??. Option C has three parameters, a, b, and c, and returns the product of them. This function can only be called with three arguments, such as my_function(2, 3, 4), which will return 24. Option D has one parameter with a default value, b, and one without, a, and returns the difference of them. This function can be called with one or two arguments, such as my_function(2) or my_function(2, 3), which will return 2 or -1, respectively.
Therefore, the correct answer is B. Option B.

NEW QUESTION 6
Assuming that the following assignment has been successfully executed: My_list – [1, 1, 2, 3]
Select the expressions which will not raise any exception. (Select two expressions.)

A. my_list[-10]
B. my_list|my_Li1st | 3| I
C. my list [6]
D. my_List- [0:1]

Answer: BD

Explanation:
The code snippet that you have sent is assigning a list of four numbers to a variable called ??my_list??. The code is as follows:
my_list = [1, 1, 2, 3]
The code creates a list object that contains the elements 1, 1, 2, and 3, and assigns it to the variable ??my_list??. The list can be accessed by using the variable name or by using the index of the elements. The index starts from 0 for the first element and goes up to the length of the list minus one for the last element. The index can also be negative, in which case it counts from the end of the list. For example, my_list[0] returns 1, and my_list[-1] returns 3.
The code also allows some operations on the list, such as slicing, concatenation, repetition, and membership. Slicing is used to get a sublist of the original list by specifying the start and end index. For example, my_list[1:3] returns [1, 2]. Concatenation is used to join two lists together by using the + operator. For example,

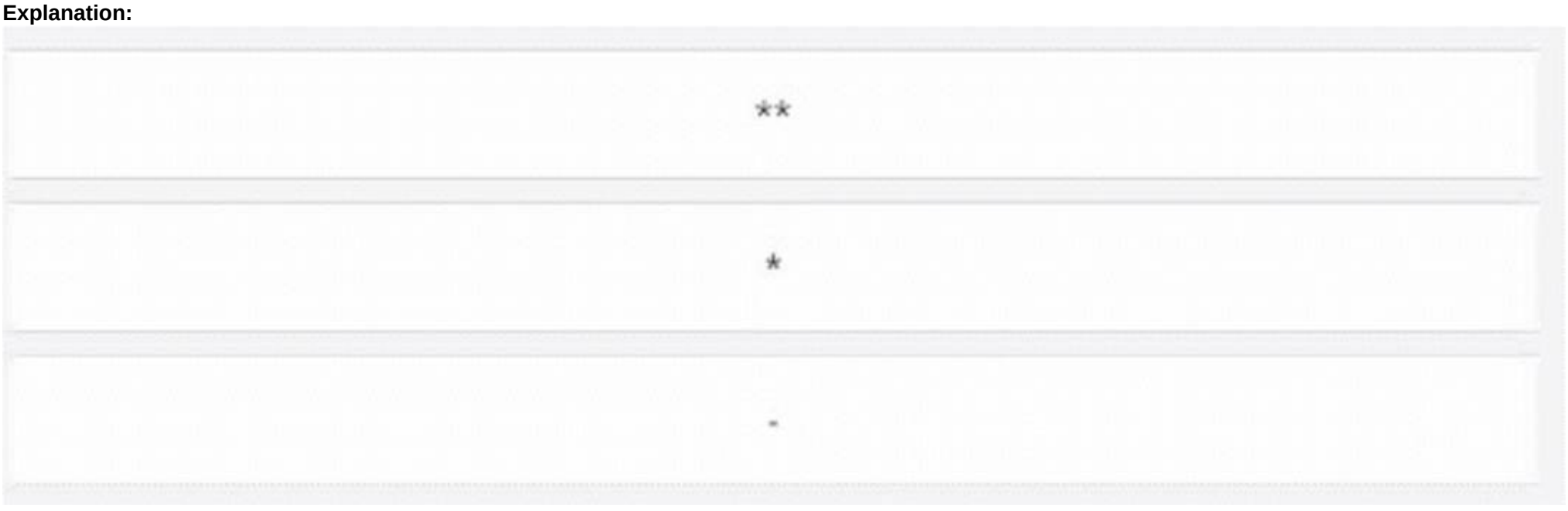
my_list + [4, 5] returns [1, 1, 2, 3, 4, 5]. Repetition is used to create a new list by repeating the original list a number of times by using the * operator. For example, my_list * 2 returns [1, 1, 2, 3, 1, 1, 2, 3]. Membership is used to check if an element is present in the list by using the in operator. For example, 2 in my_list returns True, and 4 in my_list returns False.
The expressions that you have given are trying to access or manipulate the list in different ways. Some of them are valid, and some of them are invalid and will raise an exception. An exception is an error that occurs when the code cannot be executed properly. The expressions are as follows:
* A. my_list[-10]: This expression is trying to access the element at the index -10 of the list. However, the list only has four elements, so the index -10 is out of range. This will raise an IndexError exception and output nothing.
* B. my_list|my_Li1st | 3| I: This expression is trying to perform a bitwise OR operation on the list and some other operands. The bitwise OR operation is used to compare the binary representation of two numbers and return a new number that has a 1 in each bit position where either number has a 1. For example, 3 | 1 returns 3, because 3 in binary is 11 and 1 in binary is 01, and 11 | 01 is 11. However, the bitwise OR operation cannot be applied to a list, because a list is not a number. This will raise a TypeError exception and output nothing.
* C. my list [6]: This expression is trying to access the element at the index 6 of the list. However, the list only has four elements, so the index 6 is out of range. This will raise an IndexError exception and output nothing.
* D. my_List- [0:1]: This expression is trying to perform a subtraction operation on the list and a sublist. The subtraction operation is used to subtract one number from another and return the difference. For example, 3 - 1 returns 2. However, the subtraction operation cannot be applied to a list, because a list is not a number. This will raise a TypeError exception and output nothing.
Only two expressions will not raise any exception. They are:
* B. my_list|my_Li1st | 3| I: This expression is not a valid Python code, but it is not an expression that tries to access or manipulate the list. It is just a string of characters that has no meaning. Therefore, it will not raise any exception, but it will also not output anything.
* D. my_List- [0:1]: This expression is a valid Python code that uses the slicing operation to get a sublist of the list. The slicing operation does not raise any exception, even if the start or end index is out of range. It will just return an empty list or the closest possible sublist.
For example, my_list[0:10] returns [1, 1, 2, 3], and my_list[10:20] returns []. The expression my_List- [0:1] returns the sublist of the list from the index 0 to the index 1, excluding the end index. Therefore, it returns [1]. This expression will not raise any exception, and it will output [1].
Therefore, the correct answers are B. my_list|my_Li1st | 3| I and D. my_List- [0:1]. Reference: [Python Institute - Entry-Level Python Programmer Certification]

NEW QUESTION 7
DRAG DROP
Arrange the binary numeric operators in the order which reflects their priorities, where the top-most position has the highest priority and the bottom-most position has the lowest priority.

A. Mastered
B. Not Mastered

Answer: A

Explanation:



The correct order of the binary numeric operators in Python according to their priorities is:
? Exponentiation (**)
? Multiplication (*) and Division (/, //, %)
? Addition (+) and Subtraction (-)
This order follows the standard mathematical convention of operator precedence, which can be remembered by the acronym PEMDAS (Parentheses, Exponents, Multiplication/Division, Addition/Subtraction). Operators with higher precedence are
evaluated before those with lower precedence, but operators with the same precedence are evaluated from left to right. Parentheses can be used to change the order of evaluation by grouping expressions.
For example, in the expression 2 + 3 * 4 ** 2, the exponentiation operator (**) has the highest priority, so it is evaluated first, resulting in 2 + 3 * 16. Then, the multiplication operator (*) has the next highest priority, so it is evaluated next, resulting in 2 + 48. Finally, the addition operator (+) has the lowest priority, so it is evaluated last, resulting in 50.
You can find more information about the operator precedence in Python in the following references:
? 6. Expressions — Python 3.11.5 documentation
? Precedence and Associativity of Operators in Python - Programiz
? Python Operator Priority or Precedence Examples Tutorial

NEW QUESTION 8
What is true about tuples? (Select two answers.)

A. Tuples are immutable, which means that their contents cannot be changed during their lifetime.
B. The len { } function cannot be applied to tuples.
C. An empty tuple is written as { } .
D. Tuples can be indexed and sliced like lists.

Answer: AD

Explanation:
Tuples are one of the built-in data types in Python that are used to store collections of data. Tuples have some characteristics that distinguish them from other data types, such as lists, sets, and dictionaries. Some of these characteristics are:
? Tuples are immutable, which means that their contents cannot be changed during their lifetime. Once a tuple is created, it cannot be modified, added, or removed. This makes tuples more stable and reliable than mutable data types. However, this also means that tuples are less flexible and dynamic than mutable data types. For example, if you want to change an element in a tuple, you have to create a new tuple with the modified element and assign it to the same variable12
? Tuples are ordered, which means that the items in a tuple have a defined order and can be accessed by using their index. The index of a tuple starts from 0 for the first item and goes up to the length of the tuple minus one for the last item. The index can also be negative, in which case it counts from the end of the tuple. For example, if you have a tuple t = ("a", "b", "c"), then t[0] returns "a", and t[- 1] returns "c"12
? Tuples can be indexed and sliced like lists, which means that you can get a single item or a sublist of a tuple by using square brackets and specifying the start and end index. For example, if you have a tuple t = ("a", "b", "c", "d", "e"),
then t[2] returns "c", and t[1:4] returns ("b", "c", "d"). Slicing does not raise any exception, even if the start or end index is out of range. It will just return an empty tuple or the closest possible sublist12
? Tuples can contain any data type, such as strings, numbers, booleans, lists, sets,
dictionaries, or even other tuples. Tuples can also have duplicate values, which means that the same item can appear more than once in a tuple. For example, you can have a tuple t = (1, 2, 3, 1, 2), which contains two 1s and two 2s12
? Tuples are written with round brackets, which means that you have to enclose the
items in a tuple with parentheses. For example, you can create a tuple t = ("a", "b", "c") by using round brackets. However, you can also create a tuple without using round brackets, by just separating the items with commas. For example, you can create the same tuple t = "a", "b", "c" by using commas. This is called tuple packing, and it allows you to assign multiple values to a single variable12
? The len() function can be applied to tuples, which means that you can get the
number of items in a tuple by using the len() function. For example, if you have a tuple t = ("a", "b", "c"), then len(t) returns 312
? An empty tuple is written as (), which means that you have to use an empty pair of
parentheses to create a tuple with no items. For example, you can create an empty tuple t = () by using empty parentheses. However, if you want to create a tuple with only one item, you have to add a comma after the item, otherwise Python will not recognize it as a tuple. For example, you can create a tuple with one item t = ("a",) by using a comma12
Therefore, the correct answers are A. Tuples are immutable, which means that their contents cannot be changed during their lifetime. and D. Tuples can be indexed and sliced like lists.
Reference: Python Tuples - W3SchoolsTuples in Python - GeeksforGeeks

NEW QUESTION 10
.....

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questons and Answers in PDF Format

PCEP-30-02 Practice Exam Features:

* PCEP-30-02 Questions and Answers Updated Frequently

* PCEP-30-02 Practice Questions Verified by Expert Senior Certified Staff

* PCEP-30-02 Most Realistic Questions that Guarantee you a Pass on Your FirstTry

* PCEP-30-02 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year