
Question: 1

Which of the following will be the value of the variable y?

```
>>> x = {'a': [1, 2, [3,4]], 'b': [[5, 6], 7]}
```

```
>>> y = x ['b'] [0] [1]
```

- A. 7
- B. y has no value. The following error occurred: IndexError: list index out of range
- C. 6
- D. y has no value. The following error occurred: KeyError: 'b'

Answer: C

Question: 2

What are the contents of the variable x when the following is executed in a Python interactive session?

```
x = "So you want a GIAC Certification?"
```

```
x.split() [0] [1]
```

```
print (x)
```

- A. 'So'
- B. 'So you'
- C. 'So you want a GIAC Certification?'
- D. 'So', 'you'

Answer: C

Question: 3

Which of the following commands would correct the error in the screenshot?

```
>>> def tcp_flags_as_str(flag):
...   tcp_flags = ['CWR', 'ECE', 'URG', 'ACK', 'PSH', 'RST', 'SYN', 'FIN']
...   return "|".join(list(itertools.compress(tcp_flags, map(int, format(flag
...
>>> tcp_flags_as_str(2)
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
  File "<stdin>", line 3, in tcp_flags_as_str
NameError: name 'itertools' is not defined
```

- A. import itertools
- B. modulus itertools
- C. return itertools
- D. define itertools

Answer: A

Question: 4

A user enters unexpected data into a program. Which functionality can the programmer use to present an understandable error message to the user?

- A. Casting
- B. Exception handling
- C. Dictionaries
- D. Regular expressions

Answer: B

Question: 5

A programmer attempts to run the Python program hello.py as follows, but an error occurs. What is the cause of this error?

```
student@573:~$ cat hello.py
print "hello"
student@573:~$ chmod +x hello.py
student@573:~$ ./hello.py
Warning: unknown mime-type for "hello" -- using "application/octet-stream"
Error: no such file "hello"
```

- A. hello.py is missing the line #!/usr/bin/python
- B. smtp_mime was replaced with Python
- C. Python cannot find the script "hello"
- D. hello.py is improperly encoded with UTF-16le

Answer: A

Question: 6

Review the following code, written in Python. What are the contents of variable a?

```
a = set(['cat', 'dog', 'bird'])

b = set(['violet', 'rose', 'dandelion'])

a.update(b)
```

- A. 'cat'/dog'/bird'/violet'
- B. 'dandelion', 'rose', 'cat', 'violet', 'bird', 'dog'
- C. 'violet'/rose'/dandelion'
- D. 'cat'/dog'/bird'

Answer: B

Question: 7

When the following program "question.py" is executed with Python what is the output?

```
$ cat question.py
def i(i):
    i=5
    return i

i=i(10)
print(i)

$ python question.py
```

- A. 10
- B. 5
- C. FunctionOverride: function i assigned not called
- D. Function i at 0xb7489764>

Answer: B

Explanation:

i = I (10)

it should be i = i (10)

Question: 8

What is the output of the following line of code typed into a Python interactive session?

```
>>> print(bin(0b101010 ^ 0b111000))
```

- A. 0b10101

- B. 18
- C. 0b10010
- D. 0b101101

Answer: C

Question: 9

Which of the following would produce this list?
[65, 66, 67, 68]

- A. range(1,4) + 64
- B. for x(4)+64
- C. map(ord, "ABCD")
- D. range(4)+ 65

Answer: D

Question: 10

What is the output of the ls(TCP) function?

- A. It lists all of the TCP port numbers in a TCP stream
- B. It lists all of the packets that have a TCP layer
- C. It lists the contents of the TCP layer
- D. It lists all of the fields associated with the TCP layer

Answer: A
