You submitted this quiz on **Thu 17 Apr 2014 10:18 AM MST**. You got a score of **19.00** out of **20.00**. You can attempt again, if you'd like.

This is the midterm exam. It is not due until the end of the class. But you should understand all this material by the end of week 6. You can re-take this exam up to 100 times and your highest score will be retained. So you can take this exam to help you study and check your knowledge retention. It is OK to use Python in an another window to check your answers during this exam.

What would the following Python code sequence print out?		
<pre>str = "hello there bob" print str[4]</pre>		
Your Answer	Score	Explanation
Со		
Chello		
⊙ I	0.00	
Се		
You would get an out-of-range error and the program would fail		
Total	0.00 /	
	1.00	

Question 2

What would the value of the following expression be:

$$abc = 1 + 2 - 3 * 4 + 5 - 6 / 3$$

Your Answer		Score	Explanation
0.9675			
_42			
<u>36</u>			
Zero			
● -6	~	1.00	
Total		1.00 / 1.00	

Question 3

You type in the following Python code and it tells you that you have a syntax error - what is wrong?

```
x = 12
if x < 5:
print "smaller"
else:
   print "bigger"

print "all done"</pre>
```

Your Answer		Score	Explanation
There should be a semicolon on the "x-5" statement			
There should not be a blank line after print "bigger"			
Oprint "bigger" needs to start in column 1			
oprint "smaller" needs to be indented	~	1.00	
Total		1.00 / 1.00	

What will the following Python program print out:

```
def fred():
    print "Zap"

def jane():
    print "ABC"

jane()
fred()
jane()
```

Your Answer	Score	Explanation
ABC Zap jane		
○Zap ABC Zap		
⊂Zap Zap Zap		
•ABC Zap ABC	1.00	
Total	1.00 / 1.00	

Question 5

Where in the computer is a variable such as "x" stored?

x = 123			
Your Answer		Score	Explanation
Data Warehouse			
Main Memory	~	1.00	
The Cloud			
Central Processing Unit			
Total		1.00 / 1.00	

For the following Python program, what will it print out?

```
x = -1
for value in [3, 41, 12, 9, 74, 15] :
    if value > x :
        x = value
print x
```

Your Answer		Score	Explanation
<u>•</u> 74	~	1.00	
<u>12</u>			
_3			
<u></u> -1			
Total		1.00 / 1.00	

In the following Python code:

```
x = "Hello"
print x
print type(x)
```

Produces the following output:

```
Hello
<type 'str'>
```

What is the purpose of type() - what is the output of type telling us?

Your Answer	Score	Explanation
It is telling us that the variable x is ready to be reclaimed as part of a "garbage collection" operation to free up memory.		
• It is telling us that the data stored in the variable x is a string	1 .00	
It indicates that the variable x contains a "strong" value which cannot be overridden.		
It is telling us the primary key that will be used to look up the contents of x in a database.		
Total	1.00 /	
	1.00	

Question 8

For this Python program snippet:

```
total = 0
count = 0
for abc in range(10):
   total = total + abc
   count = count + 1
ave = total / count
```

Which of the variables is the "iteration" variable?

Your Answer Score Explanation

total

ave

count

abc
1.00

Total 1.00 / 1.00

Question 9

What will the following Python program print out? (This is a bit tricky so look carefully).

```
def hello():
    print "Hello"
    print "There"

x = 10
x = x + 1
```

Your Answer		Score	Explanation
Hello			
There			
10			
11			
Nothing at all	~	1.00	
Hello			
There			
Hello There			
Total		1.00 / 1.00	

You develop the following program in Python:

```
f = int(raw_input("Enter:"))
c = ( f - 32 ) * ( 5 / 9 )
print "Celsius",c
```

And when you run it three times you get the following output:

Enter:212 Celsius 0

Enter:72 Celsius 0

Enter:15 Celsius 0

What part of the program is causing the output to always be zero?

	Score	Explanation
~	1.00	
	1.00 / 1.00	
	✓	

Question 11

For the following Python program, what will it print out?

```
x = 0
for value in [3, 41, 12, 9, 74, 15] :
```

```
if value < 10 :
    x = x + value
print x</pre>
```

Your Answer		Score	Explanation
_3			
<u></u>			
1 2	~	1.00	
_9			
Total		1.00 / 1.00	

What would the following Python code print out?

```
fline = "blah blah"

if len(fline) > 1 :
    print "More than one"
    if fline[0] == "h" :
        print "Has an h"

print "All done"
```

Your Answer	Score	Explanation
More than one		
Has an h		
All done		
All done		
Oblah blah		
Traceback		
Nothing will print		
More than one	✓ 1.00	

All done

Has an h
All done

Total

1.00 / 1.00

Question 13

What is the value of the following expression:

$$abc = 1 - 2 + 3 * 4 - 5 - 6 / 3$$

Your Answer		Score	Explanation
0 4	~	1.00	
○18			
42			
<u>_12</u>			
Total		1.00 / 1.00	

Question 14

This Python program is supposed to compute the average of a list of numbers but the output is always wrong. Which line is in error?

```
total = 0
count = 0
for abc in [3, 41, 12, 9, 74, 15] :
    total = total + abc
    count = 1
ave = total / count
print ave
```

Your Answer		Score	Explanation
ocount = 1	~	1.00	
total = 0			
count = 0			
ototal = total + abc			
Total		1.00 / 1.00	

For the following Python program, what will it print out?

```
x = -1
for value in [3, 41, 12, 9, 74, 15] :
    if value < x :
        x = value
print x</pre>
```

Your Answer		Score	Explanation
<u>-</u> 1	~	1.00	
74			
_3			
_15			
Total		1.00 / 1.00	

Question 16

What will the following Python program print out:

```
def fred():
```

print "Zap"			
<pre>def jane(): print "ABC"</pre>			
<pre>fred() jane() fred()</pre>			

Your Answer		Score	Explanation
\(\text{ZZZ}\)			
fred			
Zap			
ABC			
fred			
jane			
fred			
Zap	~	1.00	
ABC			
Zap			
ZABCZ			
Total		1.00 / 1.00	

What would the following Python code sequence print?

```
str = "hello there bob"
print str[0]
```

Your Answer	Score	Explanation
there		
Се		



What part of a computer is actually doing the addition and subtraction in the following statement:

$$x = 1 + 2 - 3 * 4 / 5 + 6;$$

Your Answer		Score	Explanation
Cloud			
Output Devices			
Disk Drive			
Central Processing Unit	~	1.00	
Total		1.00 / 1.00	

Question 19

Which of the following lines will never print out regardless of the value for x?

```
if x < 2:
    print "Below 2"
elif x < 0:
    print "Negative"
else:
    print "Something else"</pre>
```

Your Answer	Score	Explanation

Something else		
Negative	~	1.00
All three lines will print all the time		
Total		1.00 / 1.00

Question 20			
nat will the following Pytho	on program print out?		
orint "hello world"			
our Answer	Score	Explanation	
world			
hello			
42			
hello world	✓ 1.00		
- -otal	1.00 / 1.00		