You submitted this quiz on **Thu 17 Apr 2014 10:25 AM MST**. You got a score of **20.00** out of **20.00**.

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.

Question 1		
What would the following Python code sequence print out?		
<pre>str = "hello there bob" print str[4]</pre>		
Your Answer	Score	Explanation
o	✓ 1.00	
Chello		
_e		
You would get an out-of-range error and the program would fail		
Total	1.00 /	
	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
42			
<u>36</u>			
0.9675			
<u>•</u> -6	~	1.00	
Zero			
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 not be a blank line after print "bigger"			
There should be a semicolon on the "x-5" statement			
Oprint "bigger" needs to start in column 1			
print "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
Zap ABC Zap		
●ABC Zap ABC	1.00	
ABC Zap jane		
⊂Zap Zap Zap		
Total	1.00 / 1.00	

Question 5

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

	Score	Explanation
~	1.00	
	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>12</u>			
€74	✓	1.00	
<u>_</u> 15			
⊜9			
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 indicates that the variable x contains a "strong" value which cannot be overridden.			
It is telling us that the data stored in the variable x is a string	~	1.00	
It is telling us the primary key that will be used to look up the contents of x in a database.			
It is telling us that the variable x is ready to be reclaimed as part of a "garbage collection" operation to free up memory.			
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		
Hello There 10 11		
Hello There		
●Nothing at all	1.00	
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	
	~	✓ 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
_41			
12	~	1.00	
_3			
<u></u>			
Total		1.00 / 1.00	

All done

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"
```

our Answer	Score	Explanation
Has an h		
done		
olah blah		
Traceback		
ore than one		
as an h		
I done		

Nothing will print
More than one
All done
1.00
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
•4	~	1.00	
42			
<u></u> 0			
0.7365			
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
total = 0			
count = 1	~	1.00	
count = 0			
total = total + abc			
otal		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	
<u>41</u>			
<u></u>			
<u>12</u>			
Total		1.00 / 1.00	

Question 16

What will the following Python program print out:

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

def jane():
    print "ABC"

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

Explanation	Score		Your Answer
			Zap
			ABC
			fred
			jane
			fred
			fred
			jane
			fred
	1.00	✓	Zap
			ABC
			Zap
			fred
	1.00 / 1.00		Total
	.00 / 1.00		Total

What would the following Python code sequence print?

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

Your Answer	Score	Explanation



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			
Central Processing Unit	~	1.00	
Output Devices			
Input Devices			
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			
All three lines will print all the time			
Negative	~	1.00	
Below 2			
Total		1.00 / 1.00	

Question 20 What will the following Python program print out? print "hello world" Your Answer Score Explanation Abello world hello 42 Total 1.00 / 1.00