

# APS 106

**MIDTERM REVIEW**

# RULES OF THE GAME

- Must use button on the table to answer question verbally and explain your answer – you will be called on to answer by one of the instructors
- Must tell us which discipline you're in before you answer for points (we'll rely on the honour system)
- If you get the answer right, you pick the next category
- If you get the answer wrong, the next person whose hand is up can steal
- Everyone is here to learn and review for the midterm so be kind to everyone who answers!

PANEL

"HELLO WORLD"	TIME TO COMPARE AND GET LOOPY	TO AND OR NOT TO AND	GET FUNC-Y WITH IT	ERR-ING ON THE SIDE OF CAUTION	
\$250	\$250	\$250	\$250	\$250	
\$500	\$500	\$500	\$500	\$500	
\$1000	\$1000	\$1000	\$1000	\$1000	

“HELLO WORLD” · \$250

# What is the output?

```
x = 17//3  
y = 9%5  
print(x + y)
```

← BACK TO PANEL

[Question board](#)

“HELLO WORLD” - \$500

# What is the output?

```
x = "Seb"  
y = "Ben"  
print("My name", "is", x, "and I teach APS106")  
print("My name is", y, "and", "I", "teach", "APS106")
```

← BACK TO PANEL

[Question board](#)

“HELLO WORLD” - \$1000

Verbally describe the function call  
with syntax that would product this  
output using a `print()` statement:

```
hey-how-is-everything
```

[← BACK TO PANEL](#)

[Question board](#)

TIME TO COMPARE AND GET LOOPY · \$250

What are the values of var 1 and var 2 after the following code segment is executed and the while loop finishes?

```
var1 = 0;  
var2 = 2;  
  
while ((var2!=0) and ((var1 / var2) >= 0)):  
  
    var1 = var1 + 1;  
    var2 = var2 - 1;
```

← BACK TO PANEL

[Question board](#)

TIME TO COMPARE AND GET LOOPY · \$500

# What is the output of the code?

```
print("John" > "Jhon")  
print("Emma" < "Emm")
```

← BACK TO PANEL

[Question board](#)



TIME TO COMPARE AND GET LOOPY · \$1000

# Verbally explain what happens in the following piece of code:

```
n = 10
answer = 1
while n > 0:
    answer = answer + n
    n = n + 1
print(answer)
```

← BACK TO PANEL

[Question board](#)

TO AND OR NOT TO AND · \$250

# What is the output?

```
x = 100  
y = 50  
print(x and y)
```

← BACK TO PANEL

[Question board](#)

TO AND OR NOT TO AND · \$500

# What is the output?

```
x = 10
y = 50
if x ** 2 > 100 and y < 100:
    print(x, y)
```

← BACK TO PANEL

[Question board](#)

TO AND OR NOT TO AND · \$1000

Which of the following evaluates to True when a is equal to b or when a is equal to 5?

- ☐ A. `a == b == 5`
- ☐ B. `a = b or a = 5`
- ☐ C. `a == b or a == 5`
- ☐ D. `a = b and a = 5`
- ☐ E. `a == b and a = 5`

← BACK TO PANEL

[Question board](#)

TO AND OR NOT TO AND · \$1000

Which of the following evaluates to True when a is equal to b or when a is equal to 5?

- ☐ A. `a == b == 5`
- ☐ B. `a = b or a = 5`
- ☐ C. `a == b or a == 5`
- ☐ D. `a = b and a = 5`
- ☐ E. `a == b and a = 5`

← BACK TO PANEL

[Question board](#)

GET FUNC-Y WITH IT · \$250

# What is the output?

```
def power3(num) :  
    print(num**3)
```

```
result1 = power3(5)  
result2 = result1 + 1
```

What is the outcome of executing the code above?

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[Question board](#)

## GET FUNC-Y WITH IT · \$250

```
def power3(num):  
    print(num**3)
```

```
result1 = power3(5)  
result2 = result1 + 1
```

What is the outcome of executing the code above?

- ☐ result2 refers to the value 126
- ☐ result2 refers to the value 126 and is printed
- ☐ result1 refers to the value 125 and result2 refers to the value 126
- ✓ **TypeError**

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[Question board](#)

GET FUNC-Y WITH IT · \$500

# What is the output?

```
def howbig(n):  
    if n > 190:  
        return "It's huge."  
    elif n > 160:  
        return "It's pretty big."  
    else:  
        return "It's not so big."  
print(howbig(195))
```

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[Question board](#)



## GET FUNC-Y WITH IT · \$500

```
def howbig(n):  
    if n > 190:  
        return "It's huge."  
    elif n > 160:  
        return "It's pretty big."  
    else:  
        return "It's not so big."  
print(howbig(195))
```

✓ **It's huge.**

☐ It's huge.

It's pretty big.

☐ It's huge.

☐ It's pretty big.

It's pretty big.

It's not so big.

← BACK TO PANEL

[Question board](#)

## GET FUNC-Y WITH IT - \$1000

Consider this code fragment:

```
>>> def whatlocation(country):  
    # Missing function body  
>>> location = whatlocation('Canada')  
Canada  
>>> print(location)  
Canada
```

Select the missing function body from the options below.

- |                                                           |                                         |
|-----------------------------------------------------------|-----------------------------------------|
| <input type="checkbox"/> return country                   | <input type="checkbox"/> print(country) |
| <input type="checkbox"/> print(country)                   | <input type="checkbox"/> return country |
| <input type="checkbox"/> print(country)<br>return country |                                         |

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[Question board](#)

## GET FUNC-Y WITH IT - \$1000

Consider this code fragment:

```
>>> def whatlocation(country):  
    # Missing function body  
>>> location = whatlocation('Canada')  
Canada  
>>> print(location)  
Canada
```

Select the missing function body from the options below.

☐ return country  
print(country)

☐ print(country)

✓ print(country)  
return country

☐ return country

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[Question board](#)

ERR-ING ON THE SIDE OF CAUTION · \$250

A program runs and, during running is asked to divide by zero. The program crashes. What type of error is this?

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[Question board](#)

ERR-ING ON THE SIDE OF CAUTION · \$500

What will the output be from the following code?

```
print(9/3)
```

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[Question board](#)

## ERR-ING ON THE SIDE OF CAUTION · \$1000

Q. Part of a code reads:

```
ans = input("The capital of Canada is?")
if(ans == "Ottawa"):
    print ("You are wise")

else:
    print ("You are ignorant")
```

A user inputs "ottawa" and receives the response "You are ignorant".

What kind of error is that?

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[Question board](#)

# FINAL JEOPARDY



## STATES OF MATTER · FINAL JEOPARDY

Water exists in three states- solid, liquid, and gas. Write a function that takes in the temperature in Celsius and returns a string “solid”, “liquid”, or “gas” depending on the temperature. Write a program using this function that prompts the user for a temperature and prints out the resulting state of water.

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