



SOLUTIONS FOR THE FIRST REVIEW SESSION

COSC 1306

Fall 2017



First Question

- Which of the following statements are true or false?
 - Interpreted languages produce faster code than compiled languages.



First Question

- Which of the following statements are true or false?
 - Interpreted languages produce faster code than compiled languages.
 - **FALSE**



First Question

- Which of the following statements are true or false?
 - Having a **large disk drive** allows us to **store** more data on our computer.



First Question

- Which of the following statements are true or false?
 - Having a *large disk drive* allows us to *store* more data on our computer.
- **TRUE**



First Question

- Which of the following statements are true or false?
 - Algorithms always provides the correct answer but can take ***forever***.



First Question

- Which of the following statements are true or false?
 - Algorithms always provides the correct answer but can take *forever*.
- **FALSE**



First Question

- Which of the following statements are true or false?
 - The main memory is the part of the computer that executes your programs.



First Question

- Which of the following statements are true or false?
 - The main memory is the part of the computer that executes your programs.
 - **FALSE**



First Question

- Which of the following statements are true or false?
 - A three-bit binary number will never represent a number bigger than three.



First Question

- Which of the following statements are true or false?
 - A three-bit binary number will never represent a number bigger than three.
 - **FALSE**



First Question

- Which of the following statements are true or false?
 - Python expressions always return a value.



First Question

- Which of the following statements are true or false?
 - Python expressions always return a value.
 - **TRUE**



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 - Having a **large disk drive** allows us to **store** more data on our computer.



First Question

- Which of the following statements are true or false?
 - Having a *large disk drive* allows us to *store* more data on our computer.
- **TRUE**



First Question

- Which of the following statements are true or false?
 - Programs without comments are harder to read by humans.



First Question

- Which of the following statements are true or false?
 - Programs without comments are harder to read by humans.
 - **TRUE**



First Question

- Which of the following statements are true or false?
 - In Python, **Total** and **total** are two different variable names.



First Question

- Which of the following statements are true or false?
 - In Python, **Total** and **total** are two different variable names.
- **TRUE**



First Question

- Which of the following statements are true or false?
 - The Python 3 `input()` function always returns a string.



First Question

- Which of the following statements are true or false?
 - The Python 3 **input()** function always returns a string.
 - **TRUE**



First Question

- Which of the following statements are true or false?
 - You cannot run Python programs on a computer that does not have the Python interpreter installed.



First Question

- Which of the following statements are true or false?

- You cannot run Python programs on a computer that does not have the Python interpreter installed.

- **TRUE**



Second question

- What are the values of the variables a, b, c, and d after the following Python code is executed?

- `a = 6//7`
 - `b = "3" + "4"`
 - `c = 1/2 + 2`
 - `d = 2**1**2`



Second question

- What are the values of the variables *a*, *b*, *c*, and *d* after the following Python code is executed?

- `a = 6//7`
`b = "3" + "4"`
`c = 1/2 + 2`
`d = 2**1**2`

- `a = 0`



Second question

- What are the values of the variables *a*, *b*, *c*, and *d* after the following Python code is executed?
 - `a = 6//7`
`b = "3" + "4"`
`c = 1/2 + 2`
`d = 2**1**2`
 - `a = 0` `b = '34'`



Second question

- What are the values of the variables *a*, *b*, *c*, and *d* after the following Python code is executed?
 - `a = 6//7`
`b = "3" + "4"`
`c = 1/2 + 2`
`d = 2**1**2`
 - `a = 0` `b = '34'` `c = 2.5`



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 - `a = 6//7`
`b = "3" + "4"`
`c = 1/2 + 2`
`d = 2**1**2`
 - `a = 0` `b = '34'` `c = 2.5` `d = 2`
 - Because `2**1**2 = 2**(1**2)`



Third question

- Convert the following five binary numbers to know something about yourself.

011 = _____

001 = _____

011 = _____

011 = _____

111 = _____



Third question

- Convert the following five binary numbers to know something about yourself.

- $011 = 2 + 1 = 3$

8421

- $001 = \underline{\quad}$

- $011 = \underline{\quad}$

- $011 = \underline{\quad}$

- $111 = \underline{\quad}$



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- Convert the following five binary numbers to know something about yourself.

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8421

- $011 = \underline{\hspace{2cm}}$

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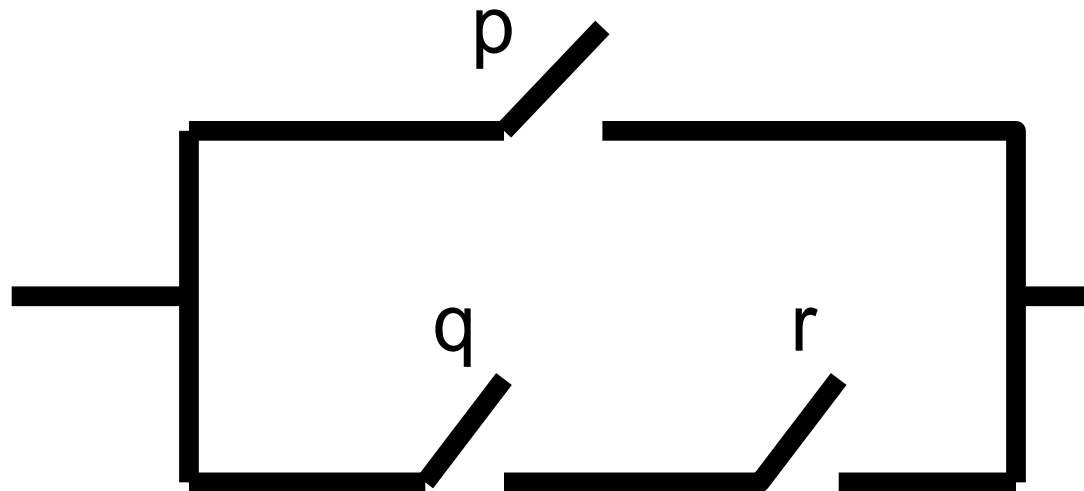
- $011 = 2 + 1 = 3$

- $111 = 4 + 2 + 1 = 7$
8421

You are
31337
=
ELEET
=
ELITE

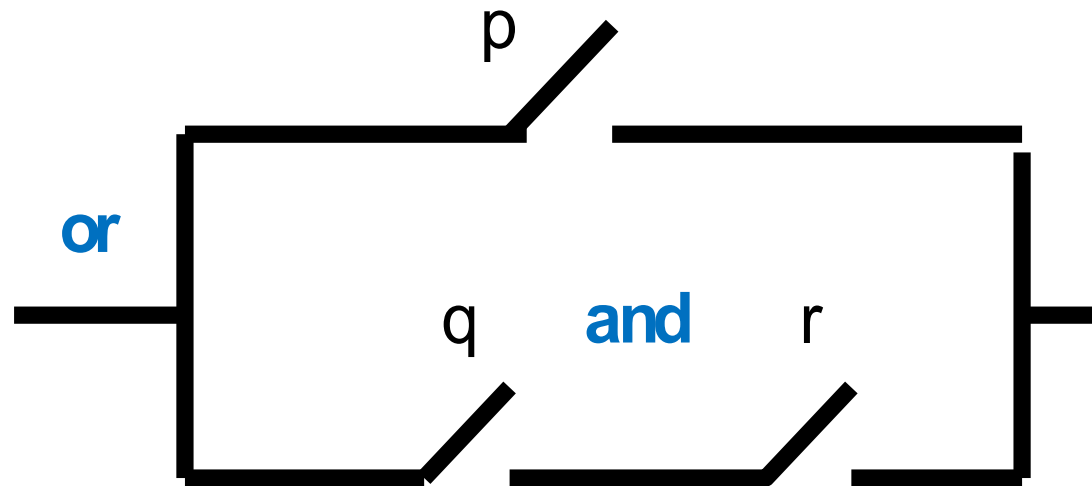
Fourth question

- Which Boolean expression is represented by the following circuit?



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- p or (q and r)**



Fifth question

- Which of these Python expressions are equivalent?

$a + (b * c)$

$a + b * c$

$(a * b) ** 2$

$a * b ** c$

$a + b / c$

$(a + b) / c$

$a * b / c * d$

$(a * b) / c * d$



Fifth question

- Which of these Python expressions are equivalent?

$a + (b * c)$ $a + b * c$

■ EQUIVALENT

$(a * b) ** 2$ $a * b ** c$

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- Which of these Python expressions are equivalent?

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$a + b / c$ $(a + b) / c$

■ NOT EQUIVALENT

$a * b / c * d$ $(a * b) / c * d$

■ EQUIVALENT



Sixth question

- You are asked to reorder the following Python statements so they form a program computing the cost per ounce of an item:

```
price = float(input("Enter the price: "))  
print("Its cost per ounce is $%.2f" % unitCost)  
nOunces = float(input("Enter the number of  
ounces of product: "))  
unitCost = price/nOunces
```



Sixth question

- You are asked to reorder the following Python statements so they form a program computing the cost per ounce of an item:

```
price = float(input("Enter the price: "))
```

```
nOunces = float(input("Enter the number of  
ounces of product: "))
```

```
unitCost = price/nOunces
```

```
print("Its cost per ounce is $%.2f" % unitCost)
```