Week 02: Problem Set

Due: 2023-01-27 23:59:00
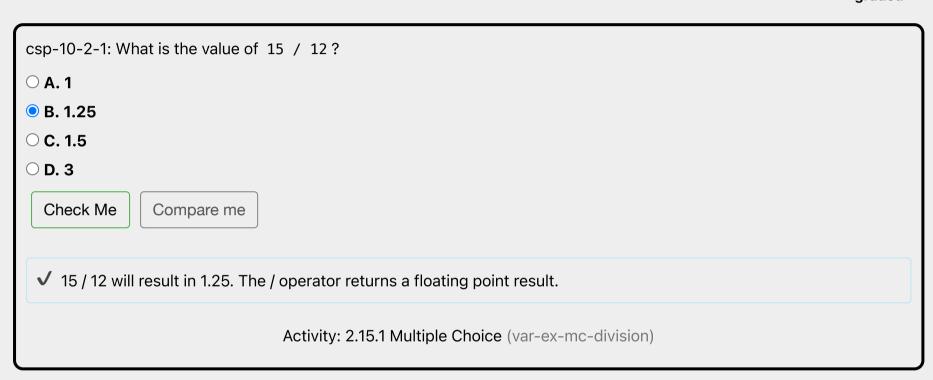
Description: Chapter 2	Self Grade: 0 of 22 = 0.0%

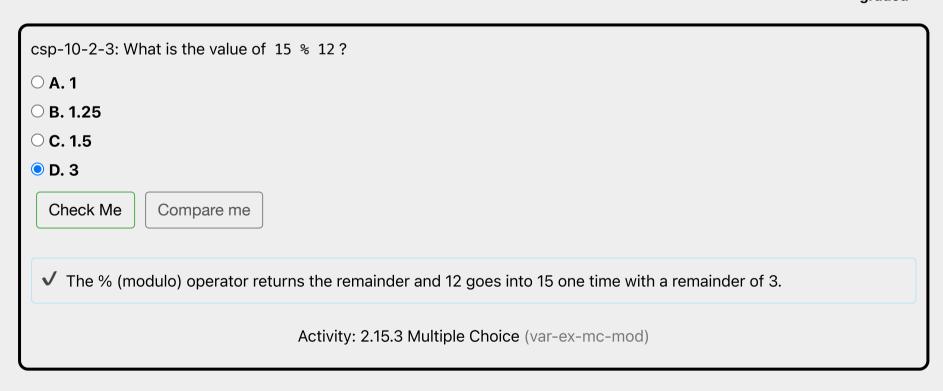You have marked this assignment Finished. Click to mark it [In Progress]

Questions

Not yet graded

csp-10-2-1: What is the value of 15 / 12 ?

- ○ **A. 1**
- ● **B. 1.25**
- ○ **C. 1.5**
- ○ **D. 3**

[Check Me] [Compare me]

✔ 15 / 12 will result in 1.25. The / operator returns a floating point result.

Activity: 2.15.1 Multiple Choice (var-ex-mc-division)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/Exercises.html#var-ex-mc-division)

Not yet graded

csp-10-2-3: What is the value of 15 % 12 ?

- ○ **A. 1**
- ○ **B. 1.25**
- ○ **C. 1.5**
- ● **D. 3**

[Check Me] [Compare me]

✔ The % (modulo) operator returns the remainder and 12 goes into 15 one time with a remainder of 3.

Activity: 2.15.3 Multiple Choice (var-ex-mc-mod)

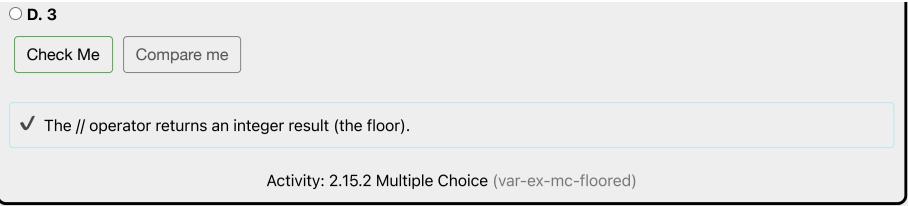Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/Exercises.html#var-ex-mc-mod)

Not yet graded
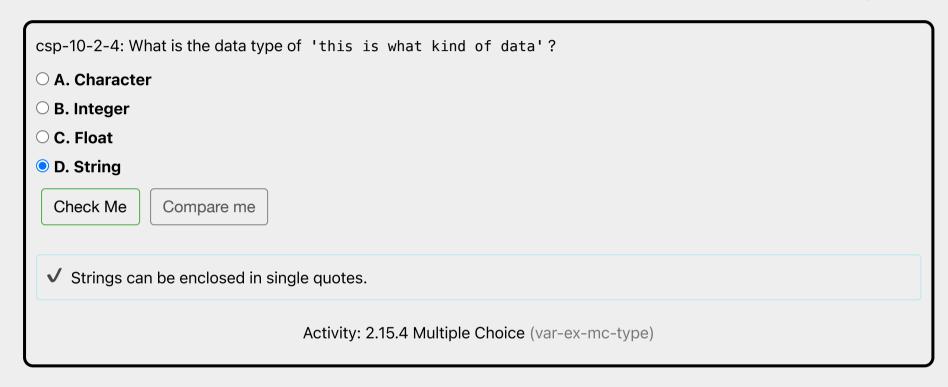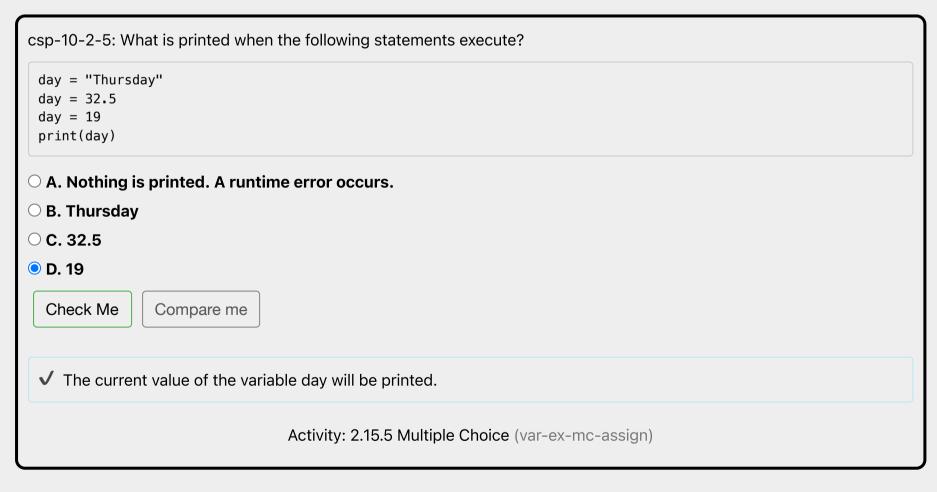
csp-10-2-2: What is the value of 15 // 12 ?

- ● **A. 1**
- ○ **B. 1.25**
- ○ **C. 1.5**

○ **D. 3**

Check Me | Compare me

✔ The // operator returns an integer result (the floor).

Activity: 2.15.2 Multiple Choice (var-ex-mc-floored)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/Exercises.html#var-ex-mc-floored)

Not yet graded

csp-10-2-4: What is the data type of `'this is what kind of data'` ?

○ **A. Character**

○ **B. Integer**

○ **C. Float**

● **D. String**

Check Me | Compare me

✔ Strings can be enclosed in single quotes.

Activity: 2.15.4 Multiple Choice (var-ex-mc-type)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/Exercises.html#var-ex-mc-type)

Not yet graded

csp-10-2-5: What is printed when the following statements execute?

```
day = "Thursday"
day = 32.5
day = 19
print(day)
```

○ **A. Nothing is printed. A runtime error occurs.**

○ **B. Thursday**

○ **C. 32.5**

● **D. 19**

Check Me | Compare me

✔ The current value of the variable day will be printed.

Activity: 2.15.5 Multiple Choice (var-ex-mc-assign)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/Exercises.html#var-ex-mc-assign)

Not yet graded

csp-10-2-6: What is printed when the following statements execute?

```
n = input("Please enter your age: ")
# user types in 18
print ( type(n) )
```
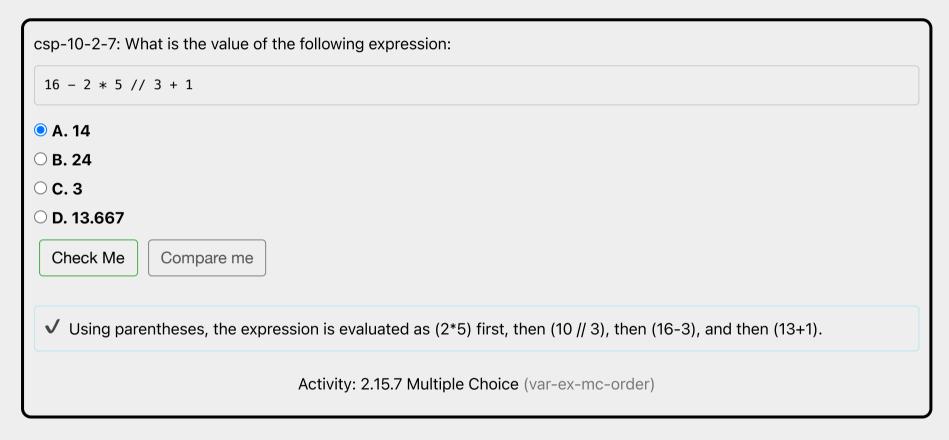
🔘 **A. <class 'str'>**

⚪ **B. <class 'int'>**

⚪ **C. <class 18>**

⚪ **D. 18**

| Check Me | Compare me |

> ✔️ All input from users is read in as a string.

Activity: 2.15.6 Multiple Choice (var-ex-mc-input)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/Exercises.html#var-ex-mc-input)

Not yet graded

csp-10-2-7: What is the value of the following expression:

```
16 − 2 * 5 // 3 + 1
```

🔘 **A. 14**

⚪ **B. 24**

⚪ **C. 3**

⚪ **D. 13.667**

| Check Me | Compare me |

> ✔️ Using parentheses, the expression is evaluated as (2*5) first, then (10 // 3), then (16-3), and then (13+1).

Activity: 2.15.7 Multiple Choice (var-ex-mc-order)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/Exercises.html#var-ex-mc-order)

Not yet graded

csp-10-2-8: After the following statements, what are the values of x and y?

```
x = 15
y = x
x = 22
```

⚪ **A. x is 15 and y is 15**

⚪ **B. x is 22 and y is 22**

⚪ **C. x is 15 and y is 22**

🔘 **D. x is 22 and y is 15**

| Check Me | Compare me |

> ✔️ Yes, x has the value 22 and y the value 15.

Activity: 2.15.8 Multiple Choice (var-ex-mc-reassign)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/Exercises.html#var-ex-mc-reassign)

Not yet graded

csp-10-2-9: Given the following code segment, what will be printed?

```
street = "125 Main Street"
print("The address is " + "street")
```

🔘 **A. The address is street**

⚪ **B. The address is 125 Main Street**

⚪ **C. It won't execute**

[Check Me] [Compare me]

✓ Since street is in double quotes it will print the string street rather than the value of the variable street.

Activity: 2.15.9 Multiple Choice (var-ex-mc-print)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/Exercises.html#var-ex-mc-print)

Not yet graded

csp-10-2-11: Given the following code segment, what will be printed?

```
friends = 4
name = "Derrik"
print("name" + " has " + str(friends) + " friends")
```

⚪ **A. Derrick has 4 friends**

🔘 **B. name has 4 friends**

⚪ **C. name has friends friends**

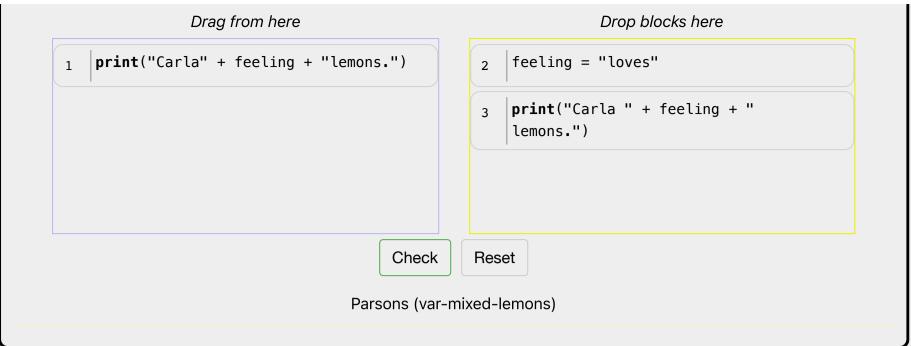⚪ **D. There will be an error**

[Check Me] [Compare me]

✓ Since name is in quotes it will print those characters rather than the value of name, but it will print the value of friends after it converts it to a string.

Activity: 2.15.11 Multiple Choice (var-string-var-print-in-quotes)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/Exercises.html#var-string-var-print-in-quotes)

Not yet graded

The following program segment should print the phrase, "Carla loves lemons.". But, the blocks have been mixed up and include an extra block that isn't correct.
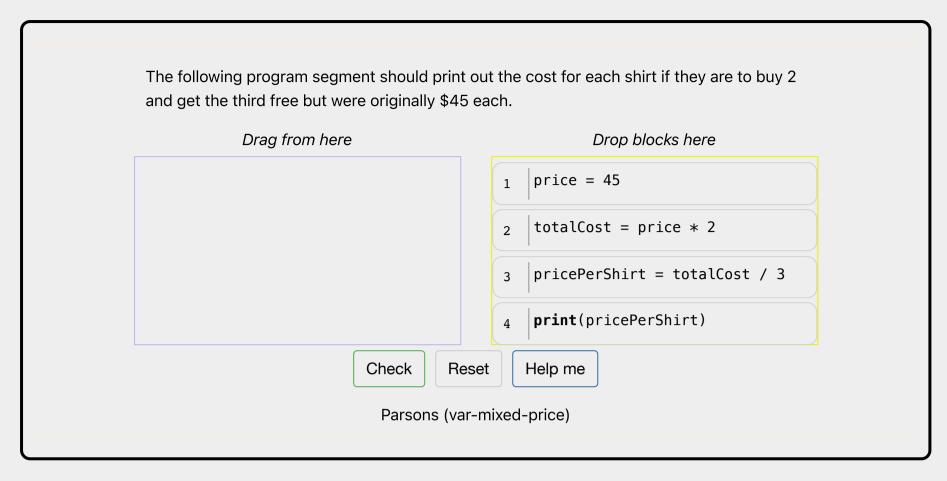
Drag from here

| 1 | `print("Carla" + feeling + "lemons.")` |

Drop blocks here

| 2 | `feeling = "loves"` |
| 3 | `print("Carla " + feeling + " lemons.")` |

Check   Reset

Parsons (var-mixed-lemons)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/MixedupCode.html#var-mixed-lemons)

Not yet graded

The following program segment should ask the user their hours per week and pay rate, then print a statement with their gross pay. But, the blocks have been mixed up and includes extra blocks that aren't correct.

Drag from here

| 1 | `pay rate = input('What is your hourly pay?')` |
| 2 | `print("Your gross pay is" grossPay)` |

Drop blocks here

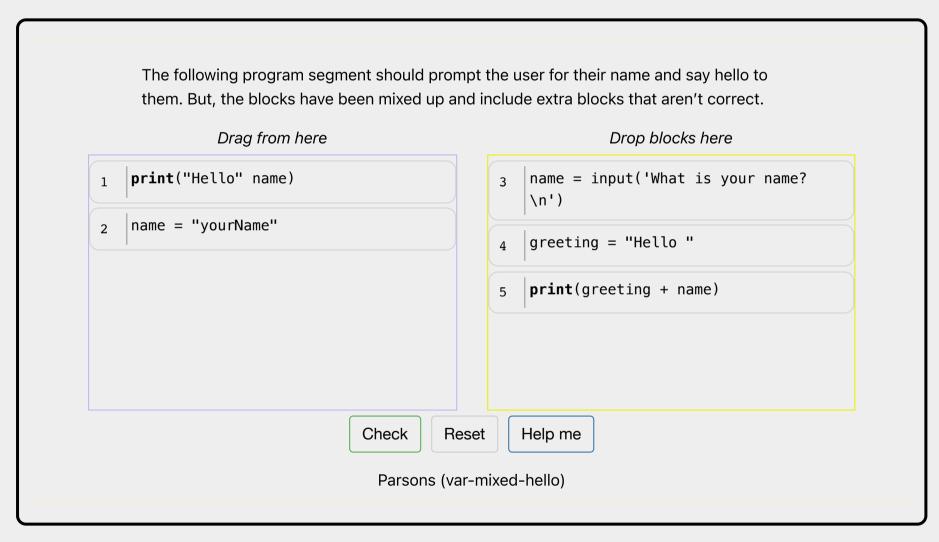| 3 | `hours = input('How many hours do you work in a week?')` |
4	`payRate = input('What is your hourly pay?')`
5	`grossPay = float(hours) * float(payRate)`
6	`print("Your gross pay is ", grossPay)`

Check   Reset   Help me

Parsons (var-mixed-hours)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/MixedupCode.html#var-mixed-hours)

Not yet graded

The following program segment should print out the cost for each shirt if they are to buy 2 and get the third free but were originally $45 each.

Drag from here   *Drop blocks here*

1	`price = 45`
2	`totalCost = price * 2`
3	`pricePerShirt = totalCost / 3`
4	`print(pricePerShirt)`

Check   Reset   Help me

Parsons (var-mixed-price)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/MixedupCode.html#var-mixed-price)

Not yet graded

The following program segment should prompt the user for their name and say hello to them. But, the blocks have been mixed up and include extra blocks that aren't correct.

Drag from here   *Drop blocks here*

| 1 | `print("Hello" name)` |
| 2 | `name = "yourName"` |

3	`name = input('What is your name?\n')`
4	`greeting = "Hello "`
5	`print(greeting + name)`

Check   Reset   Help me

Parsons (var-mixed-hello)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/MixedupCode.html#var-mixed-hello)

Not yet graded

The following program segment should print out the cost per person for a dinner including the tip. But, the blocks have been mixed up and include an extra block that isn't needed in the solution.

Drag from here

| 1 | **print**(perpersoncost) |

Drop blocks here

2	bill = 89.23
3	tip = bill * 0.20
4	total = bill + tip
5	numPeople = 3 perPersonCost = total / numPeople
6	**print**(perPersonCost)

Check   Reset   Help me

Parsons (var-mixed-tip)
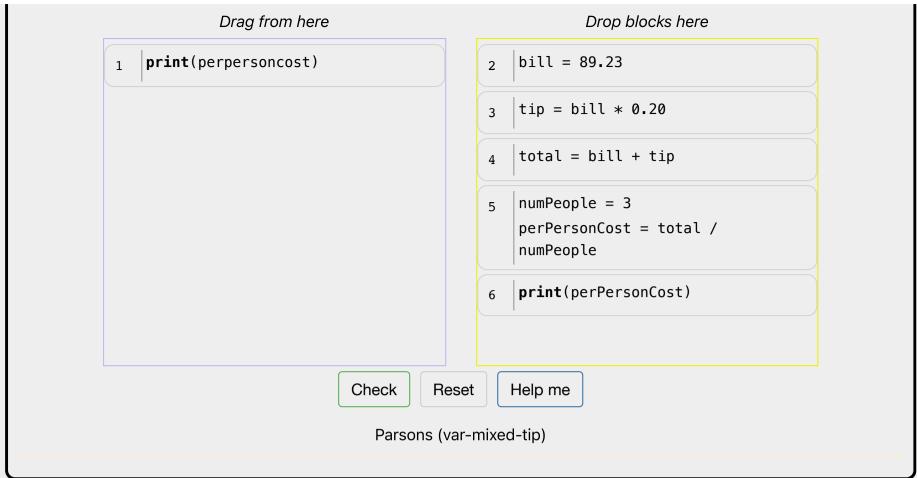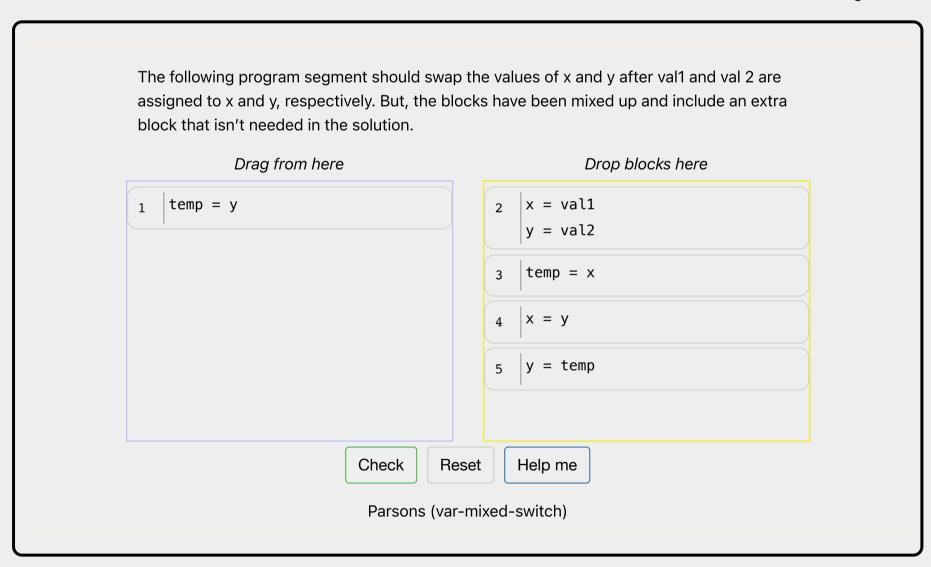
Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/MixedupCode.html#var-mixed-tip)

Not yet graded

The following program segment should swap the values of x and y after val1 and val 2 are assigned to x and y, respectively. But, the blocks have been mixed up and include an extra block that isn't needed in the solution.

Drag from here

| 1 | temp = y |

Drop blocks here

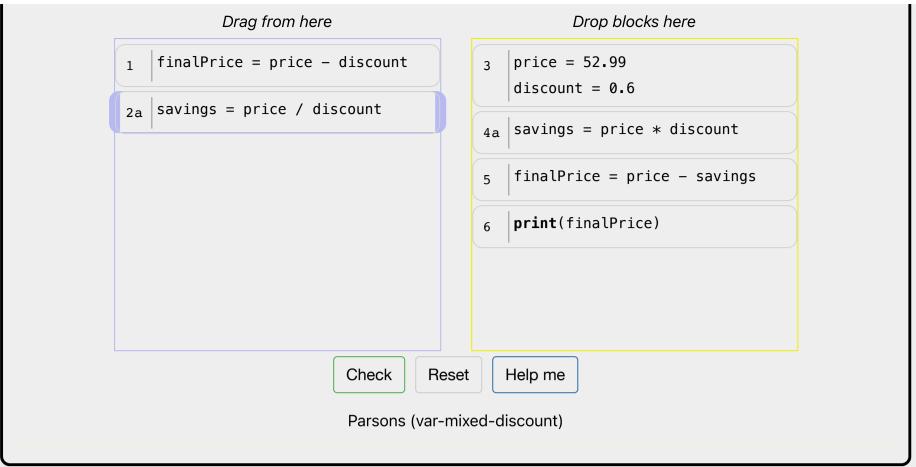| 2 | x = val1
y = val2 |
3	temp = x
4	x = y
5	y = temp

Check   Reset   Help me

Parsons (var-mixed-switch)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/MixedupCode.html#var-mixed-switch)

Not yet graded

The following program segment should print how much you will have to pay for an item that is 60% off the original price of $52.99. But, the blocks have been mixed up and include an extra block that isn't needed in the solution.
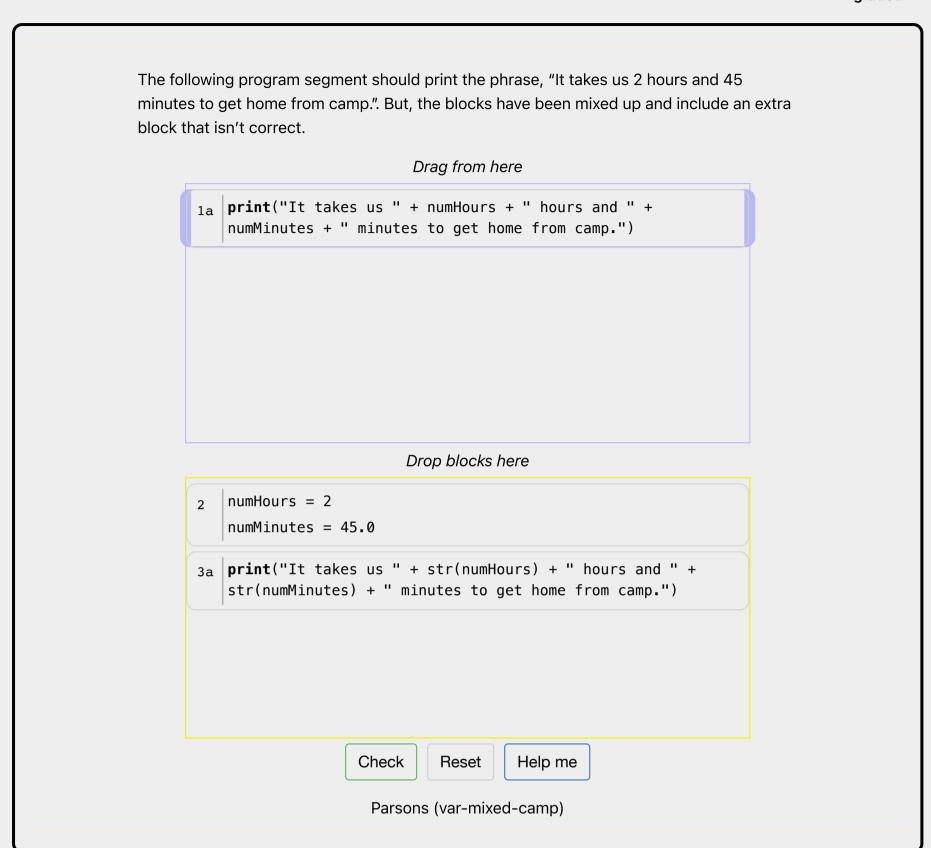
Drag from here

| 1 | `finalPrice = price – discount` |
| 2a | `savings = price / discount` |

Drop blocks here

3	`price = 52.99` `discount = 0.6`
4a	`savings = price * discount`
5	`finalPrice = price – savings`
6	**print**(finalPrice)

Check   Reset   Help me

Parsons (var-mixed-discount)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/MixedupCode.html#var-mixed-discount)

Not yet graded

The following program segment should print the phrase, "Baking cookies makes Chris happier than anything else.". But, the blocks have been mixed up and include several extra blocks that are not correct.

Drag from here

1	`var1 = [cookies]`
2	`var1 = cookies`
3	`var1 = "cookies'`

Drop blocks here

| 4 | `var1 = "cookies"` |
| 5 | **print**("Baking " + var1 + " makes Chris happier than anything else.") |

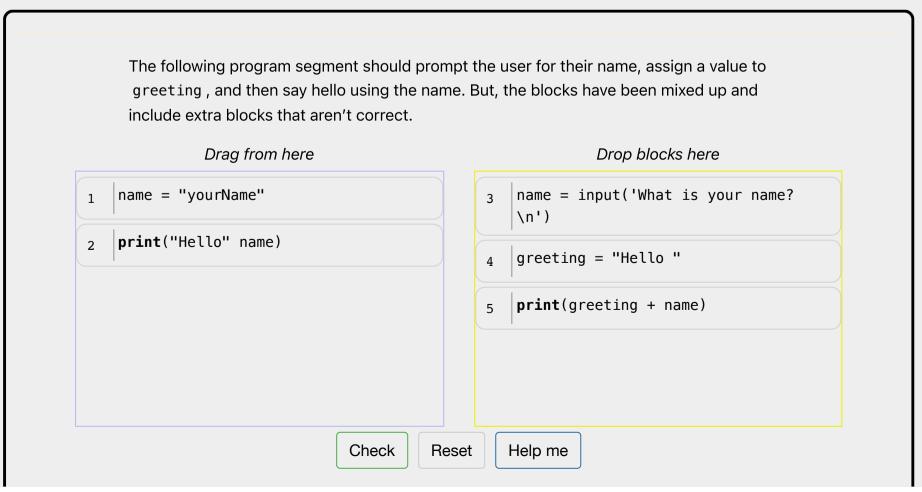Check   Reset   Help me

Parsons (var-mixed-cookies)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/MixedupCode.html#var-mixed-cookies)

Not yet graded

The following program segment should print the phrase, "It takes us 2 hours and 45 minutes to get home from camp.". But, the blocks have been mixed up and include an extra block that isn't correct.

Drag from here

```
1a  print("It takes us " + numHours + " hours and " +
        numMinutes + " minutes to get home from camp.")
```

Drop blocks here

```
2   numHours = 2
    numMinutes = 45.0
```

```
3a  print("It takes us " + str(numHours) + " hours and " +
        str(numMinutes) + " minutes to get home from camp.")
```

[Check] [Reset] [Help me]

Parsons (var-mixed-camp)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/MixedupCode.html#var-mixed-camp)

Not yet graded

The following program segment should prompt the user for their name, assign a value to `greeting`, and then say hello using the `name`. But, the blocks have been mixed up and include extra blocks that aren't correct.

Drag from here   *Drop blocks here*

```
1   name = "yourName"
```

```
3   name = input('What is your name?
        \n')
```

```
2   print("Hello" name)
```

```
4   greeting = "Hello "
```

```
5   print(greeting + name)
```

[Check] [Reset] [Help me]

Parsons (var-mixed-hello-v2)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/MixedupCode.html#var-mixed-hello-v2)

Not yet graded

csp-10-2-12: Given the following code segment, what will be printed?

```
pets = 2
name = "Mariah"
print(name + " has " + pets + " pets")
```

○ **A. Mariah has 2 pets**

○ **B. name has 2 pets**

○ **C. Mariah has pets pets**

● **D. There will be an error**

[Check Me] [Compare me]

✔ You can't concatenate an integer with a string. You need to convert it to a string first.

Activity: 2.15.12 Multiple Choice (var-string-print-no-convert-int)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/Exercises.html#var-string-print-no-convert-int)

Not yet graded

The following program segment should print the phrase, "3 + 300 + 7 = 310.". But, the blocks have been mixed up and include an extra block that isn't correct. Drag the needed blocks from the left and put them in the correct order on the right. Click the *Check Me* button to check your solution.

Drag from here

```
1   print(str(num1) + str(num2) + str(num3) = str(ans))
```

Drop blocks here

```
2   num1 = 3
    num2 = 300
    num3 = 7
    ans = 310
```

```
3   print(str(num1) + " + " + str(num2) + " + " + str(num3) +
    " = " + str(ans))
```

[Check] [Reset] [Help me]

Parsons (var-mixed-numbers)

Question in Context (/ns/books/published/cmsc-210-spring-2023/variables/MixedupCode.html#var-mixed-numbers)

You have marked this assignment Finished. Click to mark it **In Progress**

This assignment is graded and is no longer accepting submissions. You can still do the work, but it is up to your instructor whether they will accept it or not.

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