CC 1.3.8: Writing Simple Functions

Comprehension Check due Jun 20, 2021 00:26 +06

Writing Simple Functions: Question 1

1/1 point (graded)

Consider the function `intersect()` defined in the previous video, 1.3.8: Writing Simple Functions. What will `intersect([1,2,3], [3,4,5,6,7])` return?

- `[1,2,3,4,5,6,7]`
- ✔ `[3]`
- `3`
- This code contains an error.

✔

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✔ Correct (1/1 point)

Writing Simple Functions: Question 2

1/1 point (graded)

Consider the following code:

```
def is_vowel(letter):
    if #blank#:
        return(True)
    else:
        return(False)
```

Can you replace `#blank#` in the second line so `is_vowel` becomes a function that takes a letter as input and prints whether a letter is a vowel (in `"aeiouy"`)?

Enter your code here.

letter in "aeiouy" ✔

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✔ Correct (1/1 point)

Writing Simple Functions: Question 3

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1/1 point (graded)
Consider the function call `is_vowel(4)`. Why would this not work?

- `4` is not a vowel, leading to an error, and the function returns `False`.
- `4` is not a letter, and Python only tests if single letters are in a `string`.
- `4` is not a `string`, and Python cannot test if an `int` is in a `string`.
- All the above.
- None of the above.

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✔ Correct (1/1 point)

Writing Simple Functions: Question 4

1/1 point (graded)
Consider the following proposed emendation of `is_vowel`:

```
   def is_vowel(letter):
if type(letter) == int:
    letter = str(letter)
if letter in "aeiouy":
    return(True)
else:
    return(False)
```

Does this properly accommodate objects of type `int` for use with `is_vowel`? For example, will `is_vowel(4)` produce a correct answer?

- Yes
- No

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✔ Correct (1/1 point)

Writing Simple Functions: Question 5

1/1 point (graded)
Recall that $n!$ ("n factorial") is defined as the product of all integers $1, \ldots, n$. Additionally, by definition, $0! \equiv 1$.

Let's create a factorial function. Consider the following code:

```
def factorial(n):
if n == 0:
    return 1
```

Hide Notes

```
    else:
        N = 1
        for i in range(1, n+1):
            #blank#
        return(N)
```

Can you fill in the `#blank#` to complete the function as described above?

Enter your code here.

N *= i ✔

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✔ Correct (1/1 point)

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