

Tuesday Oct 22, 2024

In-class Handout

COSC 101C Intro to Computing I

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Name:

Discuss and complete the following questions with the person nearest you. You **may** be asked to share your thoughts with the class.

1. Complete the following function:

```
def phone(number:int) -> str:
    """
    Converts a 10-digit integer into a phone number XXX-XXX-XXXX

    Parameters:
        number (int): 10-digit integer representing a phone number
    Returns:
        phone_num (str): String formatted phone number

    For example, phone(3152886298) must return '315-288-6298'
    """
```

```
def phone(number:int) -> str:
    """
    Converts a 10-digit integer into a phone number XXX-XXX-XXXX

    Parameters:
        number (int): 10-digit integer representing a phone number
    Returns:
        phone_num (str): String formatted phone number

    For example, phone(3152886298) must return '315-288-6298'
    """
    number = str(number)
    area = number[:3]
    start = number[3:6]
    end = number[6:]
    return f"{area}-{start}-{end}"
```

2. Complete the following function.

```
def date(number: str) -> str:
    """
    Converts an 8-digit string into MM/DD/YYYY

    Parameters:
        number (str): 8 digit string representing a date (MMDDYYYY)
    Returns:
        date_str (str): 8 digit string MM/DD/YYYY

    For example, date("10272021") must return '10/27/2021'
    """
```

```
def date(number: str) -> str:
    """
    Converts an 8-digit string into MM/DD/YYYY
```

```
Parameters:
    number (str): 8 digit string representing a date (MMDDYYYY)
Returns:
    date_str (str): 8 digit string MM/DD/YYYY
```

```
For example, date("10272021") must return '10/27/2021'
"""
```

```
date_str = f"{number[:2]}/{number[2:4]}/{number[4:]}"
return date_str
```

```
print(date("10272021"))
```

3. Write a function called `capitalize` that takes a location (a string) and returns the location with a properly capitalized city name and country code. For example:

- `capitalize("london, uk")` should return "London, UK"
- `capitalize("los angeles, us")` should return "Los Angeles, US"

Hint: Consider the string methods `title()`, `upper()`, and `find()`. For example,

- `"cats two".title()` returns `Cats Two`
- `"cats".upper()` returns `CATS`
- `"cats ok".find("s")` returns `3`

```
def capitalize(location: str) -> str:
    """
```

```
    Properly capitalize a city name and country code
```

```
Parameters:
```

```
    location (str): A location of the form "city name, country" (e.g., "london,
```

```
Returns:
```

```
    formatted (str): Properly capitalized city name and country code.
```

```
For example,
```

```
capitalize("london, uk") must return 'London, UK'
```

```
capitalize("los angeles, us") must return 'Los Angeles, US'
```

```
"""
```

```
comma = location.find(", ")
city = location[:comma]
city = city.title()
country = location[comma+2:]
country = country.upper()
formatted = f"{city}, {country}"
return formatted
```

```
capitalize("london, uk")
```