**Program Description:**

A program that validates each piece of information using regular expressions and then outputs whether they are valid or not.

**Functions used in the Program (list in order as they are called):**

1. **Function Name:** validate\_phone\_number(phone)

**Description:**

The function validates if the given phone number is in a valid format. There are two formats:

* (XXX) XXX-XXXX
* XXX-XXX-XXXX

**Parameters:**

Phone (str): The phone number as a string.

**Variables:**

pattern (str): Expression pattern that matches a valid phone number.

**Logical Steps:**

1. Defines the regular expression pattern for a valid phone number format.
2. Uses re.match() function to see if the phone number matches the pattern.
3. Returns as true if it matches the pattern and returns false if it doesn’t.

**Returns:**

True if the phone number Is valid

False if the phone number is invalid

2. **Function Name:** validate\_ssn(ssn)

**Description:**

The function validates if the Social Security Number is in a valid format:

* XXX-XX-XXXX

**Parameters:**

Ssn (str): The SSN as a string.

**Variables:**

Pattern (str): A regular expression pattern that matches the SSN format.

**Logical Steps:**

1. Defines the regular expression pattern for a valid SSN format.
2. Uses re.match() function to see if the SSN matches the pattern.
3. Returns as true if it matches the pattern and returns false if it doesn’t.

**Returns:**

True if the SSN Is valid

False if the SSN is invalid

3. **Function Name:** validate\_zip\_code(zip\_code)

**Description:**

The function validates if the Zip Code is in one of two of the valid formats:

* XXXXX
* XXXXX-XXXX

**Parameters:**

zip\_code (str): The zip code as a string.

**Variables:**

Pattern (str): A regular expression pattern that matches the zip code format.

**Logical Steps:**

1. Defines the regular expression pattern for a valid zip code format.
2. Uses re.match() function to see if the zip code matches the pattern.
3. Returns as true if it matches the pattern and returns false if it doesn’t.

**Returns:**

True if the zip code Is valid

False if the zip code is invalid

4. **Function Name:** main()

**Description:**

Controls the whole flow of the codes. Prompts user to input phone number, SSN, and zip code to validate all of them and then displays whether they are valid.

**Parameters:**

None

**Variables:**

phone (str): input for the phone number.

ssn (str): input for the SSN.

zip\_code (str): input for the zip code.

phone\_valid (bool): Result of validating the phone number.

ssn\_valid (bool): Result of validating the SSN.

zip\_valid (bool): Result of validating the zip code.

**Logical Steps:**

1. Asks the user to input a phone number, SSN, and zip code.
2. Uses the functions to validate each input.
3. Stores each result with the x\_valid(s)
4. Displays the results and displays “Yes” for valid and “No” for invalid.

**Returns:**

Prints the results.

**Logical Steps:**

1. Asks the user to input a phone number, social security number, and zip code.
2. Validates the inputted inputs to see if they are valid and follow the formatting that’s needed
3. The results are displayed.

A screenshot of a computer program

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**Link:** <https://github.com/Art389/COP-2373>