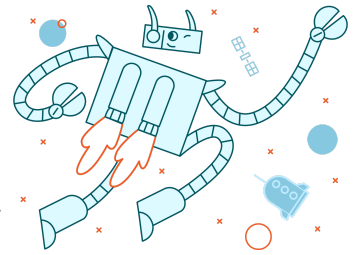


# Verify My MAC



## Goal

Develop a Python script that verifies the validity of MAC addresses. Your script will take a MAC address as input from the user and determine if it is a valid MAC address based on a specific format.

## Background

A Media Access Control (MAC) address is a unique identifier assigned to a network interface controller (NIC) for use as a network address in communications within a network segment. MAC addresses are typically represented as a sequence of six pairs of hexadecimal digits, separated by colons or hyphens, e.g., **00:11:22:33:44:55** or **00-11-22-33-44-55**.

In this exercise, you'll create a Python script that validates MAC addresses based on the following format:

- The MAC address should consist of six pairs of hexadecimal digits.
- The pairs can be separated by colons ( **:** ) or hyphens ( **-** ).
- Each hexadecimal digit can be either uppercase or lowercase.

## Tasks

1. Write a Python script that:
  - Prompts the user to enter a MAC address using **input()**.
  - Validates the format of the MAC address using regular expressions or string manipulation methods.
  - Prints a message indicating whether the MAC address is valid or not.

2. The script should consider the following validation rules:

- The MAC address should have exactly 6 pairs of hexadecimal digits.
- The pairs can be separated by colons (:) or hyphens (-), but the separators should be consistent throughout the address.
- Each hexadecimal digit can be either uppercase (A-F) or lowercase (a-f).
- The script should handle leading or trailing whitespace in the user input.

## Example

Here's an example of how the MAC address verifier should work:

```
$ python mac_address_verifier.py
Enter a MAC address: 00:11:22:33:44:55
The MAC address is valid.

$ python mac_address_verifier.py
Enter a MAC address: 00-11-22-33-44-55
The MAC address is valid.

$ python mac_address_verifier.py
Enter a MAC address: 00:11:22:33:44
The MAC address is not valid.

$ python mac_address_verifier.py
Enter a MAC address: 00:11:22:33:44:GG
The MAC address is not valid.
```

## To Submit

- The complete Python script for your MAC address verifier (`mac_address_verifier.py`).

Make sure to test your script with various MAC address inputs, including valid and invalid formats, to ensure it functions as expected.

