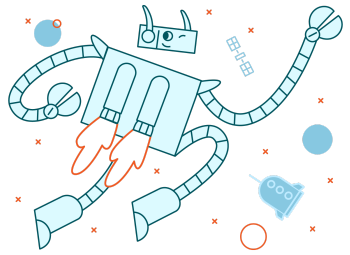


Use The Force

The police have recently apprehended a notorious criminal, known only as ShadowPulse, suspected of numerous cybercrimes.



During the operation, a digital safe, an encrypted ZIP file, was seized from the suspect's hard disk. The police believe this file contains crucial evidence but found it password-protected with a three-digit code.

Given your expertise in Python, the police department has reached out for your help in cracking this digital safe.

It's known that the suspect has a peculiar obsession with the number 3, so they believe that the password is a combination of 3 digits.

Your task

Your task is to write a Python script that attempts to unlock the encrypted ZIP file using a brute-force approach, trying all possible three-digit combinations. Here's what you need to do:

- Implement a script that tries all possible three-digit combinations (000 to 999) as the password. This technique is known as brute-force.
- For each attempt, use a **try-except** block to try opening and extracting the ZIP file. Catch the specific exception that indicates a wrong password.
- Print only the correct password once found, and extract the ZIP file's contents to a designated directory.

Example code for opening an encrypted ZIP file with PyZipper

```
import pyzipper

password = "tryme"
output_path = "C:\\Temp"

with pyzipper.AESZipFile(zip_path) as zip_file:
    zip_file.setpassword(password.encode())
    zip_file.extractall(path=output_path)
```

Guidelines

- Before starting with the brute-force script, try opening the encrypted ZIP file with **PyZipper** using a wrong password. Observe and understand the type of error thrown by **PyZipper** when the password is incorrect.
- Use a loop to iterate through the password combinations efficiently.
- Ensure your script is clean, well-commented, and explains the logic behind your brute-force approach.

Submission

Submit a **.py** file containing your script.

