

Since this is a programming chall, we first need to find out what we need to program exactly (or find a way to bypass that, but that's a 1% chance)

Initially we find 2 types of archives: gunzip and zip. Gunzips can simply be extracted, zips need a rockyou password. The initial script is as follows:

```
DIRECTORY="./test"
while true; do
    FILE=$(ls "$DIRECTORY")
    if [[ -z "$FILE" ]]; then
        break
    fi
    FILEPATH="$DIRECTORY/$FILE"
    FILETYPE=$(file --mime-type -b "$FILEPATH")
    if [[ "$FILETYPE" == "application/gzip" ]]; then
        mv "$FILEPATH" "$DIRECTORY/a.gz"
        gunzip "$DIRECTORY/a.gz"
    elif [[ "$FILETYPE" == "application/zip" ]]; then
        PASSWORD=$(fcrackzip -v -D -p /home/kali/rockyou.txt -u "$FILEPATH"
2>/dev/null | grep "PASSWORD FOUND" | awk '{print $NF}')
        if [[ -n "$PASSWORD" ]]; then
            unzip -P "$PASSWORD" "$FILEPATH" -d "$DIRECTORY"
            rm "$FILEPATH"
            mv "$DIRECTORY/archives/"* "$DIRECTORY/"
            rm -r "$DIRECTORY/archives"
        else
            break
        fi
    else
        break
    fi
done
```

Then after a few unzips we encounter a new type of archive, a 7z. This archive works the same, we need rockyou.txt to crack it. After some testing and fixing, the final bash script is:

```
DIRECTORY="./test"
while true; do
    FILE=$(ls "$DIRECTORY")
    if [[ -z "$FILE" ]]; then
        break
    fi
    FILEPATH="$DIRECTORY/$FILE"
    FILETYPE=$(file --mime-type -b "$FILEPATH")
    if [[ "$FILETYPE" == "application/gzip" ]]; then
        mv "$FILEPATH" "$DIRECTORY/a.gz"
```

```

        gunzip "$DIRECTORY/a.gz"
    elif [[ "$FILETYPE" == "application/zip" ]]; then
        PASSWORD=$(fcrackzip -v -D -p /home/kali/rockyou.txt -u "$FILEPATH"
2>/dev/null | grep "PASSWORD FOUND" | awk '{print $NF}')
        if [[ -n "$PASSWORD" ]]; then
            unzip -P "$PASSWORD" "$FILEPATH" -d "$DIRECTORY"
            rm "$FILEPATH"
            mv "$DIRECTORY/archives/*" "$DIRECTORY/"
            rm -r "$DIRECTORY/archives"
        else
            break
        fi
    elif [[ "$FILETYPE" == "application/x-7z-compressed" ]]; then
        7z2john "$FILEPATH" > "$DIRECTORY/hash.txt"
        john "$DIRECTORY/hash.txt" --wordlist=/home/kali/rockyou.txt
        PASSWORD=$(john "$DIRECTORY/hash.txt" --show | awk -F: '{print $2}' |
head -n 1)
        if [[ -n "$PASSWORD" ]]; then
            7z x -p"$PASSWORD" "$FILEPATH" -o"$DIRECTORY"
            rm "$FILEPATH" "$DIRECTORY/hash.txt"
        else
            break
        fi
    else
        break
    fi
done

```

Made with love by: AndreiCat