

PASSWORD GENERATOR DOCUMENTATION

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OVERVIEW

1. Project description

- ✓ This Python script generates a password based on user-specified criteria for the number of uppercase letters, lowercase letters, digits, and special symbols. It continues to prompt the user until valid inputs are provided. And the special task was that we can not use any kind of module or library of python .

2. Variables and Sets

- ✓
 - Uppercase: A set containing uppercase letters ('A' to 'Z').
 - lowercase: A set containing lowercase letters ('a' to 'z').
 - Numbers: A set containing digits ('0' to '9').
 - special: A set containing special symbols ('!', '#', '\$', '%', '&', '(', ')', '*', '+').

3. User Input and Validation

The script prompts the user to specify the count of each type of character required in the password:

- a: Count of uppercase letters.
- z: Count of lowercase letters.
- b: Count of digits.
- c: Count of special symbols.

4. Ensures

- ✓ The script validates each input to ensure it is a non-negative integer.

5. Continuous Execution

- ✓ The script continues to execute until valid input is provided by the user.

6. Password Generation

- The script creates lists (`Uletter`, `lletter`, `num`, `character`) from the sets (`Uppercase`, `lowercase`, `Numbers`, `special`) based on the user input counts (`a`, `z`, `b`, `c`).
- It concatenates these lists into `new_list`.
- Converts `newlist` to a set (`finalset`) to unsort order.
- Converts `finalset` back to a list (`passw`) to maintain order.

7. Output

- ✓ • Displays the length of the generated password (`passw`).
- Prints each character of the password on a single line.

8. Error Handling

- ✓ • Handles `ValueError` if the user inputs non-integer values.
- Prompts the user to retry with valid inputs upon encountering an error.

9. Example

PLEASE SPECIFY THE REQUIRED COUNT OF DIFFERENT LETTERS IN ON YOUR PASSWORD :

UPPERCASE LETTERS COUNT : 3

LOWERCASE LETTERS COUNT : 4

DIGITS LETTERS COUNT : 2

SYMBOL LETTERS COUNT : 1

Your required generated password of length 10 is : HdeF7g8Ka

IF YOU WANT ANOTHER PASSWORD SPECIFY AGAIN

Submitted by,

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