

# Task: Password Generation

---

## Description:

The user is prompted to input the desired length of the password. This length will be used to calculate the distribution of different types of characters in the password.

---

## Steps to Follow:

1. User Input: Get the desired password length of 10.
2. Character Distribution: Split length into 50% alphabetical, 30% numeric, and 20% special.
3. Alphabetical Characters: Add a mix of uppercase and lowercase letters (e.g., 'a', 'B', 'c', 'D', 'e').
4. Numeric Characters: Add digits 0-9.
5. Special Characters: Add symbols like @, #, \$, %, &, \*.
6. Shuffle: Randomize character order (e.g., a7#Bc2@D4).
7. Convert to String: Merge characters into a single string.
8. Display: Show the final password to the user.

## Example:

"a7#Bc2@D4".