import random

import math

alpha = "ABCDEFGHIJKLMNOPQRSTUVWXYZ"

beta = "abcdefghijklmnopgrstuvwxyz"

num = "0123456789"

special = "@#$%&\*"

# pass\_len=random.randint(8,13)  #without User INput

print("WELCOME TO PASSWORD GENERATOR!!")

print()

pass\_len = int(input("Enter Password Length:-\n"))

alpha\_len = pass\_len//2

beta\_len = pass\_len//3

num\_len = math.ceil(pass\_len\*30/100)

special\_len = pass\_len-(alpha\_len+num\_len+beta\_len)

password = []

def generate\_pass(length, array, is\_alpha=False):

    for i in range(length):

        index = random.randint(0, len(array) - 1)

        character = array[index]

        if is\_alpha:

            case = random.randint(0, 1)

            if case == 1:

                character = character.upper()

        password.append(character)

# alpha password

generate\_pass(alpha\_len, alpha, True)

# beta pasword

generate\_pass(beta\_len,beta,True)

# numeric password

generate\_pass(num\_len, num)

# special Character password

generate\_pass(special\_len, special)

# suffle the generated password list

random.shuffle(password)

# convert List To string

gen\_password = ""

for i in password:

    gen\_password = gen\_password + str(i)

print("Your password is:-",gen\_password,end='\n')