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#Password Generator _ Sang Hwa Lee#
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```
#import random library to use it when randomly choosing letters, digits and symbols
import random
```

```
#Function that takes letter count as input and returns randomly chosen letters
from alphabetical letters
```

```
def get_letters(letter_count):
    #initialize the alphabetical letters
    alpha_letters =
['A','B','C','D','E','F','G','H','I','J','K','L','M','N','O','P','Q','R','S','T','U',
',','V','W','X','Y','Z',

'a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v',
,w','x','y','z']
    #choose letters randomly
    random_letters = random.choices(alpha_letters,k = letter_count)
    #return the random letters
    return random_letters
```

```
#Function that takes numbers count as input and returns randomly chosen numbers
from the english digits
```

```
def get_digits(numbers_count):
    #initialize the english digits
    digits = "0123456789"
    #choose numbers randomly
    random_numbers = random.choices(digits,k = numbers_count)
    #return the random numbers
    return random_numbers
```

```
#Function that takes symbol count as input and returns randomly chosen symbols
from the special characters
```

```
def get_symbols(symb_count):
    #initialize the special characters
    special_char = "!@#%$^&*()-+_"
    #choose symbols randomly
    random_symb = random.choices(special_char,k = symb_count)
    #return the random symbols
    return random_symb
```

```
# password = ""
```

```
#While loop to iterate and generate passwords until the user inputs done
while True:
```

```
    #check if user want to create a password or not
    var = input("Create password (or done)?")
    #if choice is y or yes or sure, create password
    if (var == "yes"):
```

```
        #take the count of letters, numbers and symbols as input from user
        letter_count = int(input("How many letters?"))
        numbers_count = int(input("How many numbers?"))
        symb_count = int(input("How many special characters?"))
```

```
        #pass the count parameters to the functions and get the random letters,
numbers and symbols
        letrs = get_letters(letter_count)
        num = get_digits(numbers_count)
```

```
        special = get_symbols(symb_count)

        #create the password by summing the strings together and randomly shuffle
the password
        password = lettrs + num + special
        random.shuffle(password)
        #print the password
        print("Your password is: " + "".join(password))
    #if choice is done, exit the program
    elif (var == "done"):
        print("Thanks!")
        break;
    #if choice is unknown, print invalid input
    else:
        print(var + " is not a valid input")
```