1. **Password Generator**

```
import random

import array

MAX_LEN = int(input("enter the size of the password that to be generated must be greater than 4:"))

DIGITS = ['0', '1', '2', '3', '4', '5', '6', '7', '8', '9']

LOCASE_CHARACTERS = ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'm', 'n', 'o', 'p', 'q','r', 's', 't', 'u', 'v', 'w', 'x', 'y','z']


UPCASE_CHARACTERS = ['A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'M', 'N', 'O', 'P', 'Q','R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y','Z']


SYMBOLS = ['@', '#', '$', '%', '=', ':', '?', '.', '/', '|', '~', '>', '*', '(', ')', '<']

COMBINED_LIST = DIGITS + UPCASE_CHARACTERS + LOCASE_CHARACTERS + SYMBOLS

rand_digit = random.choice(DIGITS)

rand_upper = random.choice(UPCASE_CHARACTERS)

rand_lower = random.choice(LOCASE_CHARACTERS)

rand_symbol = random.choice(SYMBOLS)

temp_pass = rand_digit + rand_upper + rand_lower + rand_symbol


for x in range(MAX_LEN - 4):

        temp_pass = temp_pass + random.choice(COMBINED_LIST)


        temp_pass_list = array.array('u', temp_pass)

        random.shuffle(temp_pass_list)

password = ""

for x in temp_pass_list:

                password = password + x

print(password)
```

OUTPUT:

Enter the size of the password that to be generated must be greater than 4:9

M@t!0ncut