

Generating Strong Password using Python

Create a random password generator having atleast one uppercase letter, lowercase letter, special character, and a number.
the length of password should be must greater than equal to 4

In [36]: `def randompass():`

```
    '''Create a random password generator having atleast one uppercase letter, lowercase letter, digit and special character. The length of password should be must greater than equal to 4'''
```

```
    import string
```

```
    import random
```

```
    # maximum Length of password needed
```

```
    # this can be changed to suit your password length
```

```
    len_pass = int(input('Enter length of password:'))
```

```
    #characters sets
```

```
    lower = string.ascii_lowercase
```

```
    upper = string.ascii_uppercase
```

```
    digits = string.digits
```

```
    punctuation = string.punctuation
```

```
    # combines all the character from each character set above
```

```
    characters = list(lower + upper + digits + punctuation)
```

```
    # randomly select at least one character from each character set
```

```
    # at this stage, the password contains only 4 characters but
```

```
    # we want a n-character password
```

```
    temp_pass = list(random.choice(lower) + random.choice(upper) + random.choice(digits) + random.choice(punctuation))
```

```
    # now that we are sure we have at least one character from each
```

```
    # set of characters, we fill the rest of
```

```
    # the password length by selecting randomly from the combined
```

```
    # list of characters above.
```

```
    if len_pass >= 4:
```

```
        for i in range(len_pass - 4):
```

```
            temp_pass.append(random.choice(characters))
```

```
        random.shuffle(temp_pass)
```

```
        # shuffle temporary password
```

```
        # to prevent it from having a consistent pattern
```

```
        # where the beginning of the password is predictable
```

```
        password=''.join(temp_pass)
```

```
        # join the temporary password with empty string
```

```
        # to form the password
```

```
        return password
```

```
    else:
```

```
        return 'Please enter length greater than 4'
```

```
# print out password
```

```
print(randompass())
```

Enter length of password:10
6Cik<DHE!=



In []: