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# syml @ SYMLArch in ~/Sources/Crypto/home1 [15:25:23] C:130
$ python home4.py
done! password: (Q=win*5
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```

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1 password:
2 (Q=win*5
```

code:

```
1 import hashlib
2 from itertools import permutations
3 import multiprocessing
4
5
6 flag = False
7
8
9 def signalCrackProcess(pwd_list, target):
10     for i in pwd_list:
11         pwd = "".join(ch for ch in i)
12         hash = hashlib.sha1(pwd.encode()).hexdigest()
13         if hash == target:
14             print("done! password:", pwd)
15             flag = True
16             exit()
17     #print("end")
18     exit()
19
20
21 target = "67ae1a64661ac8b4494666f58c4822408dd0a3e4"
22
23 alpha_list = "QqWw%58(=0Ii*+nN"
24
25 for i in range(8, 10):
26     cnt = 0
27     pwd_list = [[] for k in range(8)]
28     for j in permutations(alpha_list, i):
29         pwd_list[cnt % 8].append(j)
30         cnt += 1
31         if cnt == 8192:
32             pool = []
33             for k in range(8):
34
35                 pool.append(multiprocessing.Process(target=signalCrackProcess, args=
36                     (pwd_list[k], target)))
37                 for k in pool:
38                     k.start()
39                     k.join()
```

```
38         for k in pool:
39             del(k)
40         pwd_list = [[] for k in range(8)]
41         cnt = 0
42     if flag:
43         exit()
44
```