

In [3]:

```
1 #1
2
3
4 def func(s):
5     k=""
6     for i in range(len(s)):
7         k+=s[i]*2
8     print(k)
9
10 func("String")
11 func("Hello World!")
12 func("1234!_ ")
```

SSttrriinngg  
HHeellllloo WWoorrlldd!!  
11223344!!\_\_

In [10]:

```
1 #2
2
3 def reverse(k):
4     if (k==True or k==False) and type(k)!=int:
5         if k:
6
7             print(False)
8         elif ~k:
9             print(True)
10
11
12     else:
13         print("boolean expected")
14
15
16 reverse(True)
17 reverse(False)
18 reverse(0)
19 reverse(None)
20
```

False  
True  
boolean expected  
boolean expected

In [14]:

```
1 # 3
2
3
4 def func(n):
5     return int(2**n *0.5)
6
7
8 print(func(1), "mm")
9 print(func(4), "mm")
10 print(func(21), "mm")
```

1 mm  
8 mm  
1048576 mm

In [16]:

```
1 # 4
2
3 def index_of_caps(s):
4     l=[]
5     for i in range(len(s)):
6         if s[i].isupper():
7             l.append(i)
8     print(l)
9
10 index_of_caps("eDaBiT")
11
12 index_of_caps("eQuINoX")
13 index_of_caps("determine")
14 index_of_caps("STRIKE")
15 index_of_caps("sUn")
```

[1, 3, 5]  
[1, 3, 4, 6]  
[]  
[0, 1, 2, 3, 4, 5]  
[1]

In [17]:

```
1 # 5
2
3 def func(n):
4
5     l=[i for i in range(1,n+1) if i%2==0]
6     print(l)
7
8 func(8)
9 func(4)
10 func(2)
```

[2, 4, 6, 8]  
[2, 4]  
[2]

