

## 24th sep\_python\_for\_loopfunctions

February 12, 2024

```
[ ]: s="shamnu"  
len(s)
```

```
[ ]: def find_len(s):  
    if s == "":  
        return 0  
    else :  
        return 1+find_len(s[1:])
```

```
[ ]: find_len("shamnu")
```

```
[ ]: find_len("pwwskills")
```

```
[ ]: s
```

```
[ ]: s[::-1]
```

```
[ ]: def find_reverse(s):  
    if s=="":  
        return ""  
    else :  
        return find_reverse(s[1:])+s[0]
```

```
[ ]: find_reverse("shamnu")
```

```
[ ]: find_reverse("pwwskills")
```

```
[ ]: s="asda jf"
```

```
[ ]: def find_char_count(s,c):  
    if s=="":  
        return 0  
    elif s[0] == c:  
        return 1+ find_char_count(s[1:],c)  
    else:  
        return find_char_count(s[1:],c)
```

```
[ ]: find_char_count(s, 'f')
```

```
[ ]: find_char_count(s, 'a')
```

```
[ ]: find_char_count(s, 'c')
```

```
[ ]: l=[4,5,6,3,4,5,6,6,7]
```

```
[ ]: def check_sort_list(l):  
    if len(l)<=1:  
        return True  
    elif l[0] > l[1]:  
        return False  
    else :  
        return check_sort_list(l[1:])
```

```
[ ]: check_sort_list(l)
```

```
[ ]: def check_per_square(n,start = 1):  
    if n == start **2:  
        return True  
    elif n < start**2:  
        return False  
    else:  
        return check_per_square(n,start+1)
```

```
[ ]: check_per_square(64)
```

```
[ ]: check_per_square(6)
```

iterables/iteration

```
[ ]: l=[2,3,4,5,6]  
a=10  
s="shamnu"
```

```
[ ]: for i in l:  
    print (i)
```

```
[ ]: for i in s:  
    print (i)
```

```
[ ]: for i in a:  
    print (i)
```

```
[ ]: iter(10)
```

```
[ ]: s1=iter("shamnu")
```

```
[ ]: s1
```

```
[ ]: next(s1)
```

```
[ ]: next(s1)
```

```
[ ]: for i in s:  
    print(i)
```

```
[ ]: for i in s2:  
    print(i)
```

```
[ ]: s2="pwwskills"
```

```
[ ]: next(s2)
```

```
[ ]: for i in s2:  
    print(i)
```

```
[ ]: iter(20)
```

```
[ ]: iter([2,3,4,5])
```

```
[ ]: iter([20])
```

```
[ ]: for i in [2,3,4,5]:  
    print (i)
```

```
[ ]: l=iter([2,3,4,5])
```

```
[ ]: next(l)
```

```
[ ]: next(l)
```

```
[ ]: next(l)
```

```
[ ]: next(l)
```

```
[ ]: next(l)
```

```
[ ]: for i in 2423:  
    print(i)
```

```
[ ]: for i in {2,3,4,5,6,67}:  
    print(i)
```

```
[ ]: iter({2,3,4,5,6,67})
```

```
[ ]: for i in (2,3,4,5):  
      print (i)
```

```
[ ]: iter((2,3,4,5))
```

```
[ ]: iter(True)
```

```
[ ]: d=iter({'key':"dgfsjd"})
```

```
[ ]: next(d)
```

```
[ ]: iter(20)
```

```
[ ]: range(0,5)
```

```
[ ]: list(range(0,5))
```

```
[ ]: for i in range(0,5):  
      print(i)
```

```
[ ]: i=iter(range(0,5))
```

```
[ ]: next(i)
```

```
[ ]: next(i)
```

```
[ ]: next(i)
```

```
[ ]: next(i)
```

```
[ ]: next(i)
```

```
[ ]: range(0,5)
```

```
[ ]: len("shamnu")
```

```
[2]: def count_fun(n):  
      i=1  
      while i<=n:  
          yield i  
          i=i+1
```

```
[3]: count_fun(9)
```

```
[3]: <generator object count_fun at 0x7f34bb11de00>
```

```
[4]: for i in count_fun(9):  
      print(i)
```

```
1  
2  
3  
4  
5  
6  
7  
8  
9
```

```
[7]: for i in count_fun(-3):  
      print (i)
```

```
[9]: j=iter(count_fun(9))
```

```
[11]: next(j)
```

```
[11]: 1
```

```
[12]: next(j)
```

```
[12]: 2
```

```
[18]: def count_fun1(n):  
      i=1  
      while i<=n:  
          return i  
          i=i+1
```

```
[19]: count_fun1(5)
```

```
[19]: 1
```

```
[20]: def count_fun1(n):  
      i=1  
      l=[]  
      while i<=n:  
          l.append(i)  
          i=i+1  
      return l
```

```
[21]: count_fun1(5)
```

```
[21]: [1, 2, 3, 4, 5]
```

```
[22]: def count_fun(n):  
      i=1  
      while i<=n:  
          yield i  
          i=i+1
```

```
[27]: count_fun1(5)
```

```
[27]: [1, 2, 3, 4, 5]
```

```
[28]: def fib(n):  
      a,b=0,1  
      for i in range(n):  
          yield a  
          a,b = b , a+b
```

```
[29]: for i in fib(9):  
      print(i)
```

```
0  
1  
1  
2  
3  
5  
8  
13  
21
```

```
[1]: ls
```

```
"03rd_september'23_operators and control flow.ipynb"  
09thseptember23_pythonintroductiontofunctions.ipynb  
10_9_23python_functions.ipynb  
"16thsep'23_python_conditionalstatementloops.ipynb"  
"16thseptember'23_python_conditional_statement_loops.ipynb"  
"17thseptember'23_forloop_lambda_map_reduce_filter_recursion.ipynb"  
20agust2023.ipynb  
23rd_september_python_whileloop_break.ipynb  
'24th_sep_python_for_loopfunctions.ipynb'  
2ndAug20230operators.ipynb  
2ndseptember20230operators.ipynb  
'conditionalstatement python3_9_23.ipynb'  
half3rd_september.ipynb  
new-workspace.jupyterlab-workspace
```

```
python_variables_19th_august_23.ipynb
sample.txt
trial_oct14.ipynb
Untitled10.ipynb
Untitled11.ipynb
Untitled12.ipynb
Untitled13.ipynb
Untitled14.ipynb
Untitled15.ipynb
Untitled16.ipynb
Untitled17.ipynb
Untitled18.ipynb
Untitled1.ipynb
Untitled2.ipynb
Untitled3.ipynb
Untitled4.ipynb
Untitled5.ipynb
Untitled6.ipynb
Untitled7.ipynb
Untitled8.ipynb
Untitled9.ipynb
'Untitled Folder'/
Untitled.ipynb
untitled.py
worksheetquiz.ipynb
```

```
[2]: pwd
```

```
[2]: '/home/jovyan/work'
```

```
[4]: open('sample.txt')
```

```
[4]: <_io.TextIOWrapper name='sample.txt' mode='r' encoding='UTF-8'>
```

```
[5]: for i in open('sample.txt'):
      print(i)
```

Humans cannot literally read the minds of others, but can create mental models so as to effectively intuit people's thoughts and feelings. This is known as empathic accuracy, and it involves "reading" cues telegraphed by the words, emotions, and body language of another person.

Most people are able to read others to some degree, but those on the autism spectrum or individuals afflicted with psychotic disorders may struggle to discern the emotions or social cues of others.

Often, knowing our own mind and motivations is challenging enough, let alone the minds of strangers or even relatives, friends, or partners. In relationships, many people make the critical mental mistake of overestimating a partner or family member's ability to read their own thoughts, assuming that anyone who knows them well should also know what they think or feel, even if they haven't said it out loud.

## Contents

How People Read Each Other

Improving Your People-Reading

When Mind Reading Is a Challenge

How People Read Each Other

In science fiction stories, mind reading is routinely used for nefarious purposes. In the real world, having a clear sense of what others think and feel helps us avoid conflict and miscommunication and strengthen personal relationships.

When attempting to read someone's mind-or, more accurately, their mood-body language, tone, and choice of words are usually the best places to begin. Another critical element is empathy: Being able to put oneself in someone else's shoes can provide key insights into their perspective, and make understanding their thoughts, feelings, and actions that much easier.

Can people read each other's minds?

```
[11]: def read_file(file_name):  
      with open(file_name) as file:  
          for i in file:  
              yield i
```

```
[12]: read_file('sample.txt')
```

```
[12]: <generator object read_file at 0x7fe86ee5c660>
```



```
[13]: for i in read_file('sample.txt'):
      print(i)
```

Humans cannot literally read the minds of others, but can create mental models so as to effectively intuit people's thoughts and feelings. This is known as empathic accuracy, and it involves "reading" cues telegraphed by the words, emotions, and body language of another person.

Most people are able to read others to some degree, but those on the autism spectrum or individuals afflicted with psychotic disorders may struggle to discern the emotions or social cues of others.

Often, knowing our own mind and motivations is challenging enough, let alone the minds of strangers or even relatives, friends, or partners. In relationships, many people make the critical mental mistake of overestimating a partner or family member's ability to read their own thoughts, assuming that anyone who knows them well should also know what they think or feel, even if they haven't said it out loud.

## Contents

### How People Read Each Other

### Improving Your People-Reading

### When Mind Reading Is a Challenge

### How People Read Each Other

In science fiction stories, mind reading is routinely used for nefarious purposes. In the real world, having a clear sense of what others think and feel helps us avoid conflict and miscommunication and strengthen personal relationships.

When attempting to read someone's mind-or, more accurately, their mood-body language, tone, and choice of words are usually the best places to begin. Another critical element is empathy: Being able to put oneself in someone else's shoes can provide key insights into their perspective, and make understanding their thoughts, feelings, and actions that much easier.

Can people read each other's minds?

[ ]: