Syntax of a for loop

```
my_iterable = [1,2,3]
for item_name in my_iterable:
    print(item_name)
```

In [1]: `mylist = [1,2,3,4,5,6,7,8,9,10]`

In [2]:
```python
for num in mylist:
    print(num)
```
```
1
2
3
4
5
6
7
8
9
10
```

In [6]:
```python
for num in mylist:
    print('hello')
```
```
hello
hello
hello
hello
hello
hello
hello
hello
hello
hello
```

In [8]:
```python
for num in mylist:
    #check for even
    if num%2==0:
        print(num)
```
```
2
4
6
8
10
```

In [12]:
```python
#check for even or odd
for num in mylist:
    if num%2 == 0:
        print(f'even number: {num}')
    else:
        print(f'odd number: {num}')
```
```
odd number: 1
even number: 2
odd number: 3
even number: 4
odd number: 5
even number: 6
odd number: 7
even number: 8
odd number: 9
even number: 10
```

In [14]:
```python
list_sum = 0

for num in mylist:
    list_sum = list_sum + num
    print(list_sum)
```
```
1
3
6
10
15
21
28
36
45
55
```

In [15]:
```python
list_sum = 0

for num in mylist:
    list_sum = list_sum + num
print(list_sum)
```
```
55
```

In [16]:
```python
mystring = 'hello world'

for letter in mystring:
    print(letter)
```
```
h
e
l
l
o

w
o
r
l
d
```

In [18]:
```python
for letter in 'hello world':
    print('cool!!')
```
```
cool!!
cool!!
cool!!
cool!!
cool!!
cool!!
cool!!
cool!!
cool!!
cool!!
cool!!
```

In [20]:
```python
tup = (1,2,3)

for item in tup:
    print(item)
```
```
1
2
3
```

In [21]: `mylist = [(1,2),(3,4),(5,6)]`

In [22]:
```python
for item in mylist:
    print(item)
```
```
(1, 2)
(3, 4)
(5, 6)
```

In [23]:
```python
#tuple unpacking

for (a,b) in mylist:
    print(a)
    print(b)
```
```
1
2
3
4
5
6
```

In [26]:
```python
#tuple unpacking
for (a,b) in mylist:
    print(a)
```
```
1
3
5
```

In [27]:
```python
#tuple unpacking
for (a,b) in mylist:
    print(b)
```
```
2
4
6
```

In [29]: `mylist = [(1,2,3),(5,6,7),(8,9,10)]`

In [31]:
```python
#tuple unpacking
for (a,b,c) in mylist:
    print(c)
```
```
3
7
10
```

In [32]:
```python
d = {'k1':1,'k2':2,'k3':3}

for item in d:
    print(item)
```
```
k1
k2
k3
```

In [33]:
```python
for item in d.keys():
    print(item)
```
```
k1
k2
k3
```

In [35]:
```python
for item in d.values():
    print(item)
```
```
1
2
3
```

In [36]:
```python
for item in d.items():
    print(item)
```
```
('k1', 1)
('k2', 2)
('k3', 3)
```

In [41]:
```python
d = {'k1':1,'k2':2,'k3':3}

for key,value in d.items():
    print(value)
```
```
1
2
3
```

In [ ]: