```
1.def even_num_sum(data: list) -> int:
 2.   total = 0
3.
   4.for e in data:
    5.   if e % 2 == 0:
      6.     total += e
7.
         8.    return total
```

data	Value returned
[10, 3, 5, 8, 20]	38
[-4, 7, 2, 9, 12]	10

[10, 3, 5, 8, 20]

Line	total	e	output			
2	0					
4		10				
6	10					
4		3				
4		5				
4		8				
6	18					
4		20				
6	38					
8			38			

[-4, 7, 2, 9, 12]

Line	total	e	output			
2	0					
4		-4				

6	-4					
4		7				
4		2				
6	-2					
4		9				
4		12				
6	10					
8			10			

```
def search_target(data: list[int], target: int) -> bool: # As before, you need to suggest a name.
    index = 0
    stopped = False

    while index < len(data) and not stopped:
        if data[index] == target:
            stopped = True
        index += 1

    return stopped
```

```
def ???(data: list[int], target: int) -> bool: # As before, you need to suggest a name.
    index = 0
    stopped = False

    while index < len(data) and not stopped:
        if data[index] == target:
            stopped = True
        index += 1

    return stopped
```

data	target	Value returned
[12, 45, 3, 18, 25]	18	True
[24, 8, -3, 42, 15]	43	False

[12, 45, 3, 18, 25]

Line	index	stopped				
2	0					
3		False				
8	1					
8	2					
8	3					
7		True				
10		True				

[24, 8, -3, 42, 15]

Line	index	stopped				
2	0					
3		False				
8	1					
8	2					
8	3					
8	4					
8	5					
10		False				

```
cities = [ "New York", "London", "Tokyo", "Sydney", "Berlin" ]

print(f"The last {len(cities)} cities to host major international events:")
for city in cities:
        print(city)
```

Line	cities	output				
1	"New York", "London", "Tokyo", "Sydney", "Berlin"					
3		The last 5 cities to host major international events:				
4	New York					
5		New York				
4	London					
5		London				
4	Tokyo					
5		Tokyo				
4	Sydney					
5		Sydney				
4	Berlin					
5		Berlin				

```
number_list = [ 8, 14, 22, 5 ]
end = len(number_list)
temp: int

temp = number_list[0]
for i in range(1, len(number_list)):    1,4
    number_list[i-1] = number_list[i]          number_list[0] = 14, number_list[1] = 22, [2]=5
        number_list[end-1] = temp              number_list[3] = 8 , number_list[3] = 8, [3]=8
```

```
number_list = [ 8, 14, 22, 5 ]
end = len(number_list)
temp: int

temp = number_list[0]
for i in range(1, len(number_list)):
    number_list[i-1] = number_list[i]
number_list[end-1] = temp
```

Line	number_list	end	temp	i	number_list[0]	number_list[1]	number_list[2]	number_list[3]
1	8, 14, 22, 5							
2		4						
5			8					
6				1				
7					14			
6				2				
7						22		
6				3				
7							5	
8								8