EXERCISE 6.B

class Queue:

def \_\_init\_\_(self):

self.queue=[]

def is\_empty(self):

return len(self.queue)==0

def enqueue(self,item):

self.queue.append(item)

def dequeue(self):

if self.is\_empty():

raise IndexError("queue is empty")

return self.queue.pop(0)

def peek(self):

if self.is\_empty():

raise IndexError("queue is empty")

return self.queue[0]

def size(self):

return len(self.queue)

def is\_palindrome(s):

queue=Queue()

for char in s:

queue.enqueue(char)

while queue.size()>1:

if queue.dequeue()!=queue.queue[-1]:

return False

queue.queue.pop()

return True

test\_string="radar"

if is\_palindrome(test\_string):

print(f'"{test\_string}"is a palindrome.')

else:

print(f'"{test\_string}"is not a palindrome.')

test\_string="hello"

if is\_palindrome(test\_string):

print(f'"{test\_string}"is a palindrome.')

else:

print(f'"{test\_string}"is not a palindrome.')

OUTPUT

"radar"is a palindrome.

"hello"is not a palindrome.