**Algorithm recognisePalindromes (String str)**

**//returns boolean**

**//determines whether str is a palindrome**

**//create an empty queue and an empty stack**

**aQueue.createQueue()**

**aStack.createStack()**

**//insert each character of the string into both**

**//the queue and the stack**

**length = length of str**

**for(i = 1 through length)**

**{**

**nextChar = ith character of str**

**aQueue.enqueue(nextChar)**

**aStack.push(nextChar)**

**}**

**//compare the queue characters with the stack**

**//characters**

**charactersAreEqual = true**

**while(aQueue is not empty and charactersAreEqual)**

**{**

**aQueue.getFront(queueFront)**

**aStack.getTop(stackTop)**

**if(queueFront equals stackTop)**

**{**

**aQueue.dequeue()**

**aStack.pop()**

**}**

**else**

**charactersAreEqual = false**

**}**

**Return charactersAreEqual**