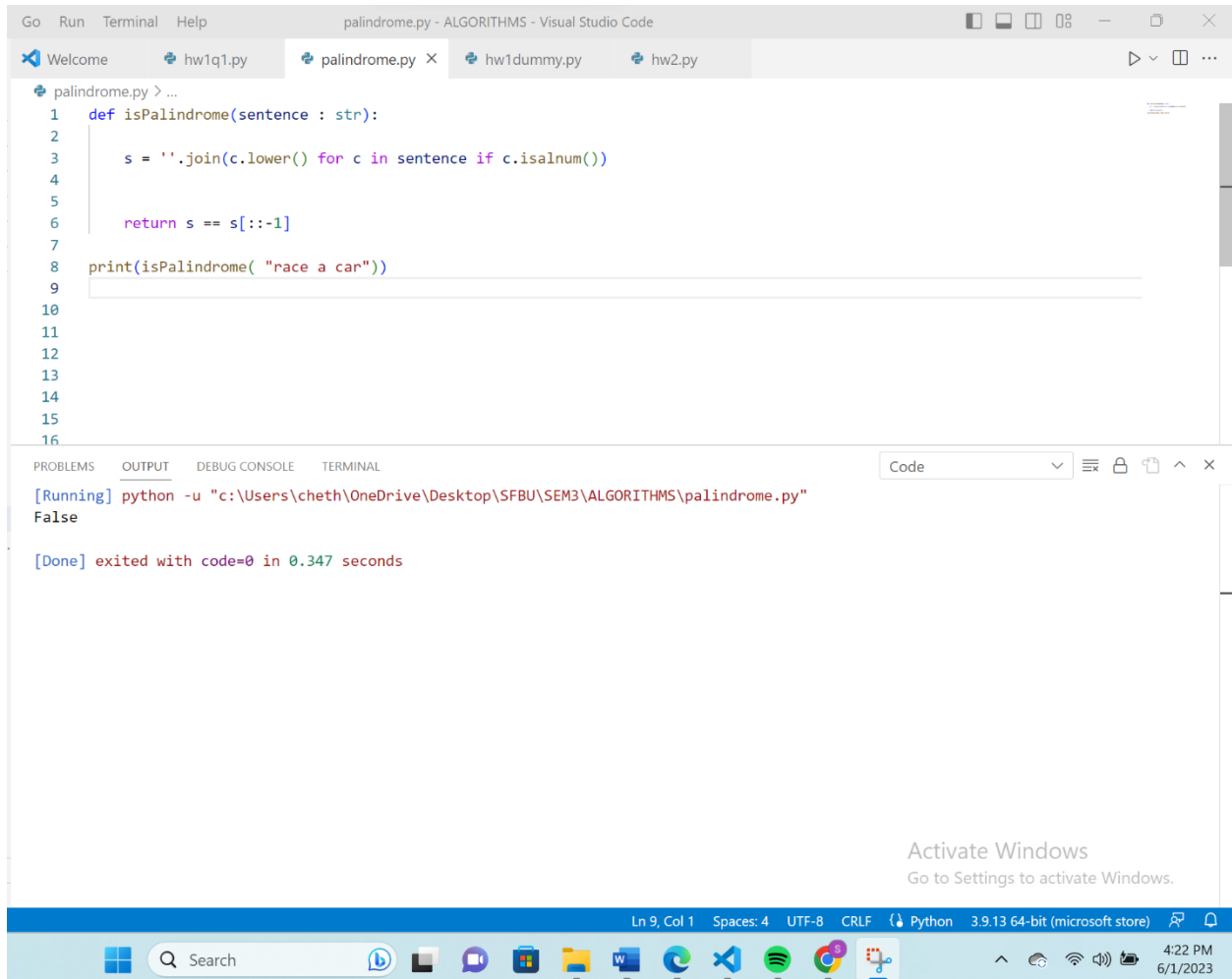


Homework2 q3



The screenshot shows the Visual Studio Code interface with a Python file named `palindrome.py` open. The code defines a function `isPalindrome` that takes a string `sentence` and returns `True` if it is a palindrome, otherwise `False`. The function uses `str[::-1]` to reverse the string and compares it to the original string. A test call `print(isPalindrome("race a car"))` is present. The output window shows the command `python -u "c:\Users\cheth\OneDrive\Desktop\SFBU\SEM3\ALGORITHMS\palindrome.py"` being executed, resulting in the output `False`. The status bar at the bottom indicates the file is at line 9, column 1, using UTF-8 encoding with CRLF line endings, and is a Python 3.9.13 64-bit file from the Microsoft Store.

```
1 def isPalindrome(sentence : str):
2
3     s = ''.join(c.lower() for c in sentence if c.isalnum())
4
5     return s == s[::-1]
6
7
8 print(isPalindrome("race a car"))
9
10
11
12
13
14
15
16
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

[Running] python -u "c:\Users\cheth\OneDrive\Desktop\SFBU\SEM3\ALGORITHMS\palindrome.py"

False

[Done] exited with code=0 in 0.347 seconds

Activate Windows
Go to Settings to activate Windows.

Ln 9, Col 1 Spaces: 4 UTF-8 CRLF Python 3.9.13 64-bit (microsoft store)

Search

4:22 PM 6/1/2023

Flowchart

start is Palindrome

input sentence

`s = ".join((c.lower() for c in sentence if c.isalpha()))`

output: `(s == s[::-1])`

end function return

Trace table

step	input	s	$s = s \vee (s \wedge \neg \text{car})$	Screen
1	race a car			
2		raceacar		
3			False.	
4				False.

Testcases

