DAILY ONLINE ACTIVITIES SUMMARY

Date:	**19-05-2020**	**Name:**	**Chetana H**
Sem & Sec	**VI A**	**USN:**	**4AL17CS021**

Online Test Summary

Subject	**CGV IA Test**		
Max. Marks	**60**	**Score**	**55**

Certification Course Summary

Course	**Python for Machine learning**		
Certificate Provider	**GreatLearning**	**Duration**	**5hr**

Coding Challenges

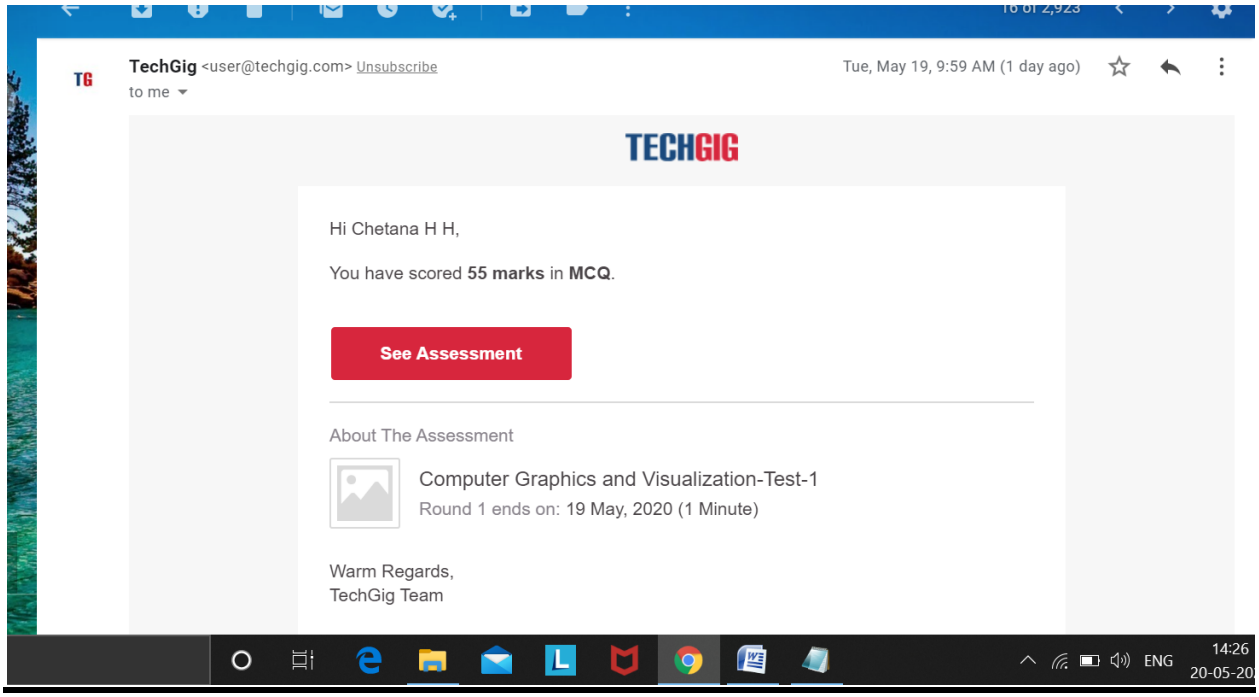
Problem Statement:

1.Using methods charAt() & length() of String class, write a program to print thefrequency ofeach character in a string.

2.Write down a java program to print even and odd numbers series respectivelyfrom twothreads: t1 and t2 synchronizing on a shared object
Let t1 print message "ping — >" and t2 print message ",—-pong".

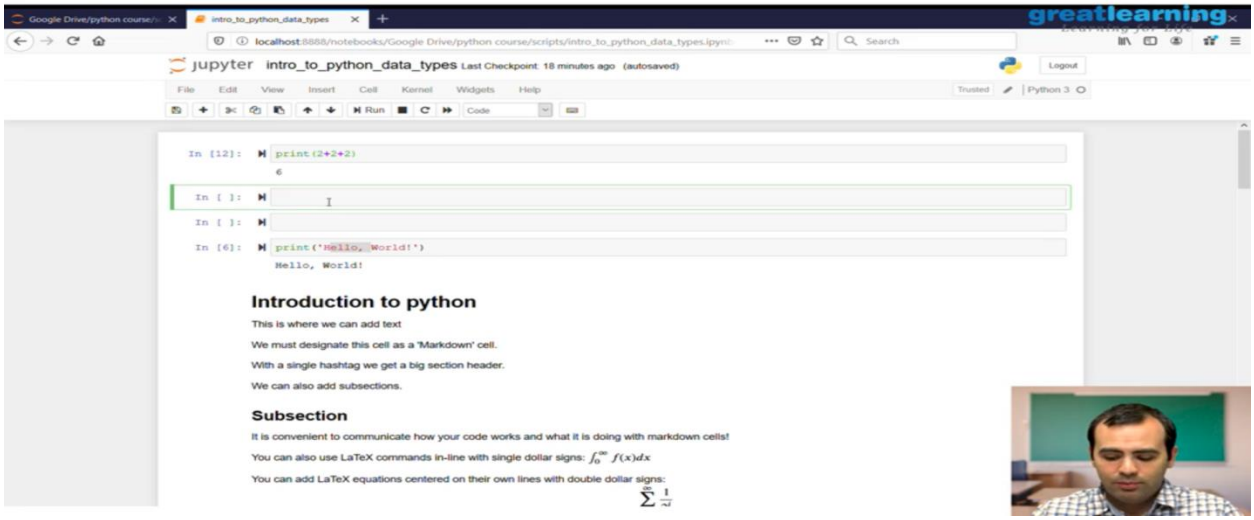
Status:Completed,executed

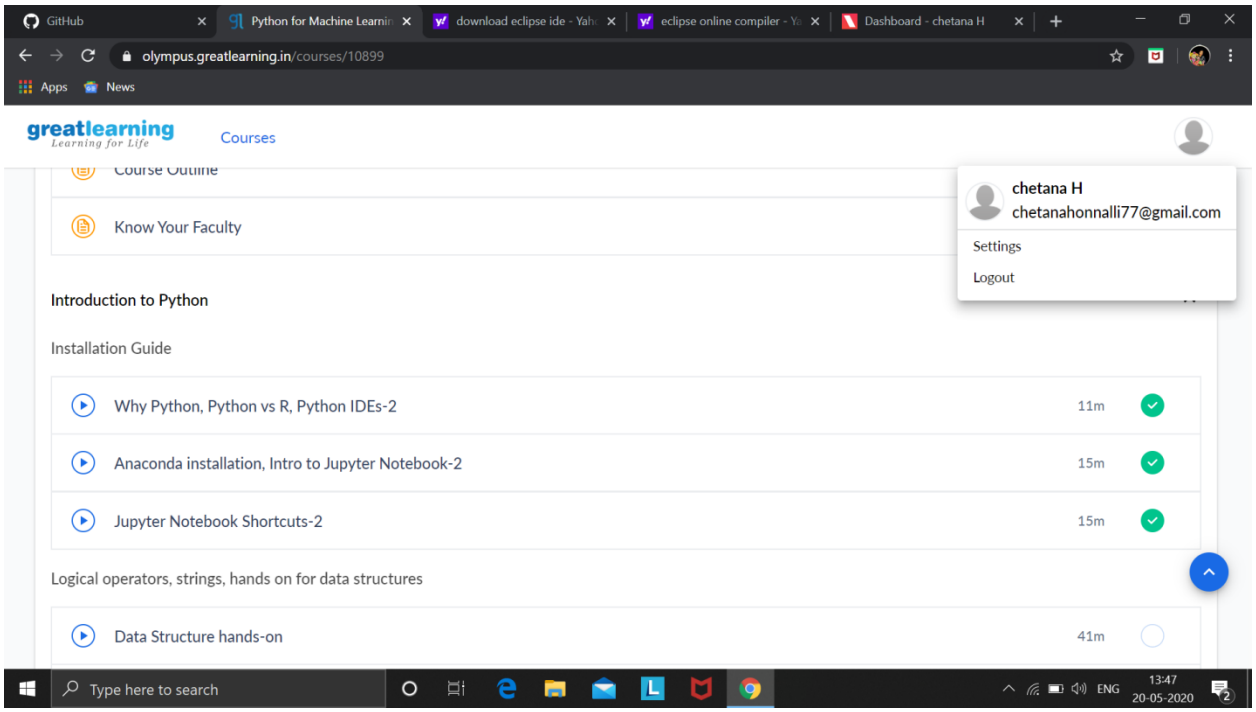
Uploaded the report in Github	**Yes**
If yes Repository name	https://github.com/chetana-H/certification-and-online-coding
Uploaded the report in slack	**Yes**



Online Certification Details

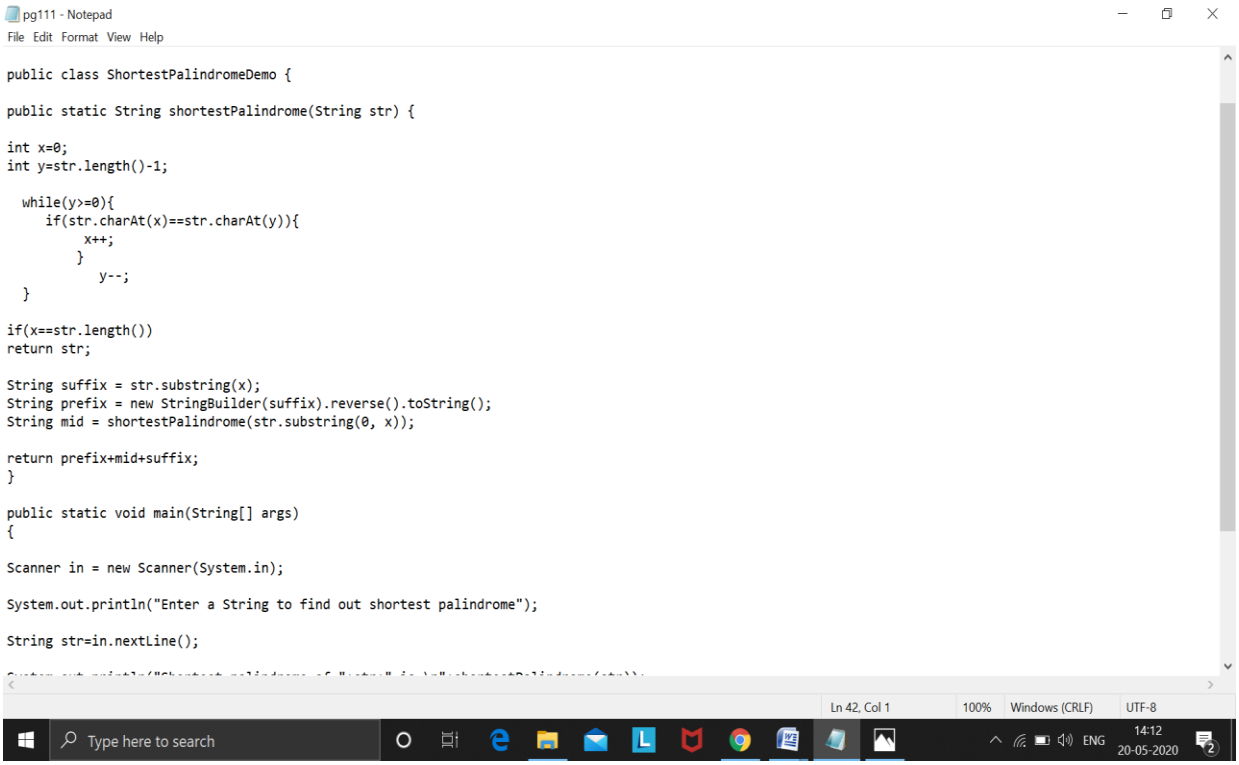
Modules completed:
-Why python, python vs R,
-Anaconda installation,Intro to Jupyter Notebook-2
-Jupiter Notebook Shortcut-2

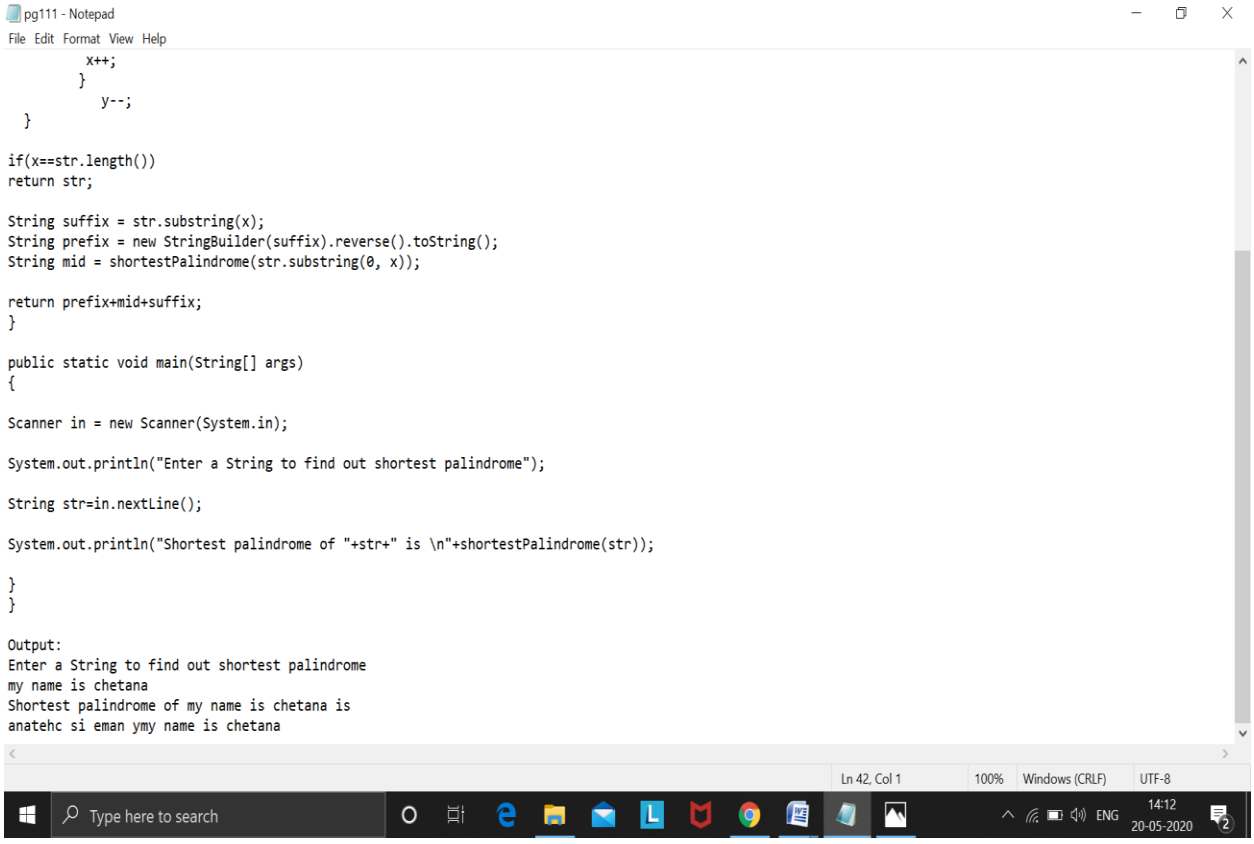




Coding Challenge Details

1.We have a Letter or a word then we need add some letters to it and need to find out shortest palindrome For example we take "S": S will be the shortest palindrome string. If we take "xyz": zyxyz will be the shortest palindrome string So we need to add some characters to the given string or character and find out what will be the shortest palindrome string by using simple java program


pg111 - Notepad
File Edit Format View Help
public class ShortestPalindromeDemo {
public static String shortestPalindrome(String str) {
int x=0;
int y=str.length()-1;
while(y>=0){
if(str.charAt(x)==str.charAt(y)){
x++;
}
y--;
}
if(x==str.length())
return str;
String suffix = str.substring(x);
String prefix = new StringBuilder(suffix).reverse().toString();
String mid = shortestPalindrome(str.substring(0, x));
return prefix+mid+suffix;
}
public static void main(String[] args)
{
Scanner in = new Scanner(System.in);
System.out.println("Enter a String to find out shortest palindrome");
String str=in.nextLine();
Ln 42, Col 1
100%
Windows (CRLF)
UTF-8
Type here to search
ENG
14:12
20-05-2020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x++;
}
y--;
}
if(x==str.length())
return str;
String suffix = str.substring(x);
String prefix = new StringBuilder(suffix).reverse().toString();
String mid = shortestPalindrome(str.substring(0, x));
return prefix+mid+suffix;
}
public static void main(String[] args)
{
Scanner in = new Scanner(System.in);
System.out.println("Enter a String to find out shortest palindrome");
String str=in.nextLine();
System.out.println("Shortest palindrome of "+str+" is \n"+shortestPalindrome(str));
}
}
Output:
Enter a String to find out shortest palindrome
my name is chetana
Shortest palindrome of my name is chetana is
anatehc si eman ymy name is chetana
Ln 42, Col 1
100%
Windows (CRLF)
UTF-8
Type here to search
ENG
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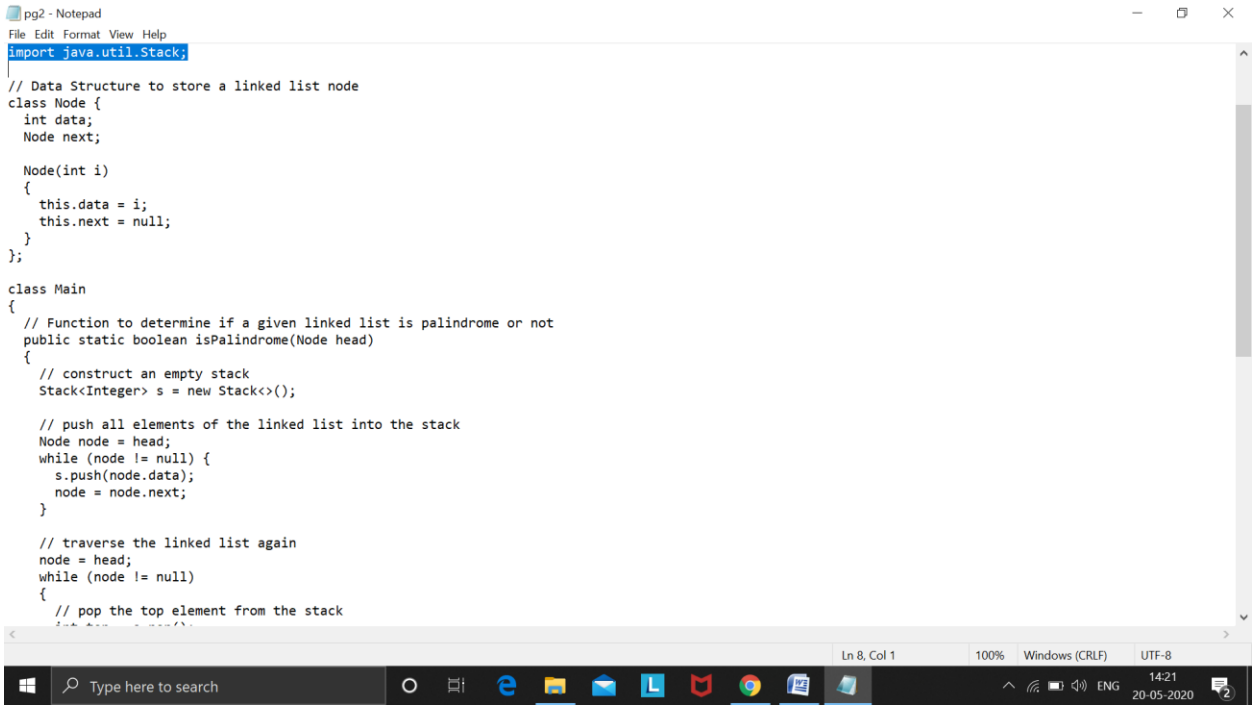
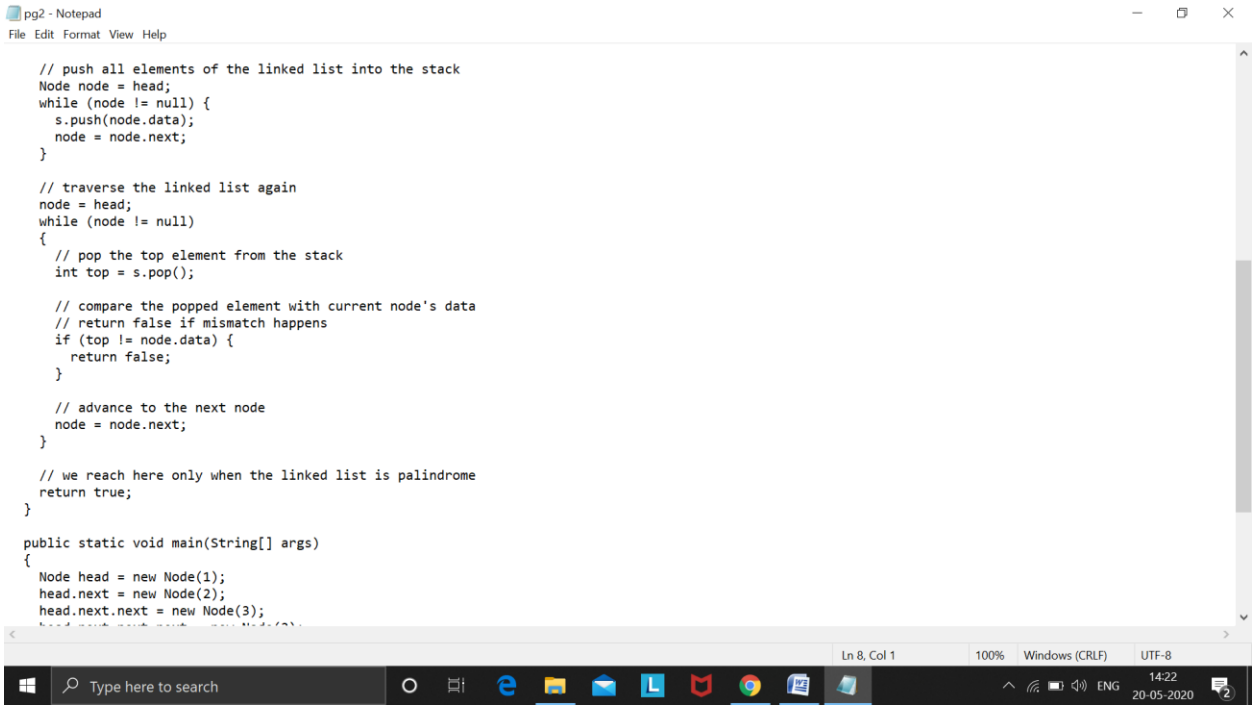
20-05-2020

2. Write a simple code to identify given linked list is palindrome or not by using stack. First take a Stack. Traverse through each node of the linked list and push each node value to Stack. Once the traversal & copying is done, iterate through linked list from head node again. In each iteration, pop one stack element and compare with node value in respective iteration. It is expected to match stack popped value with node value. In case of all matches, its a palindrome. Any one element mismatch makes it not a palindrome.

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// push all elements of the linked list into the stack
Node node = head;
while (node != null) {
s.push(node.data);
node = node.next;
}
// traverse the linked list again
node = head;
while (node != null)
{
// pop the top element from the stack
int top = s.pop();
// compare the popped element with current node's data
// return false if mismatch happens
if (top != node.data) {
return false;
}
// advance to the next node
node = node.next;
}
// we reach here only when the linked list is palindrome
return true;
}
public static void main(String[] args)
{
Node head = new Node(1);
head.next = new Node(2);
head.next.next = new Node(3);
Ln 8, Col 1
100%
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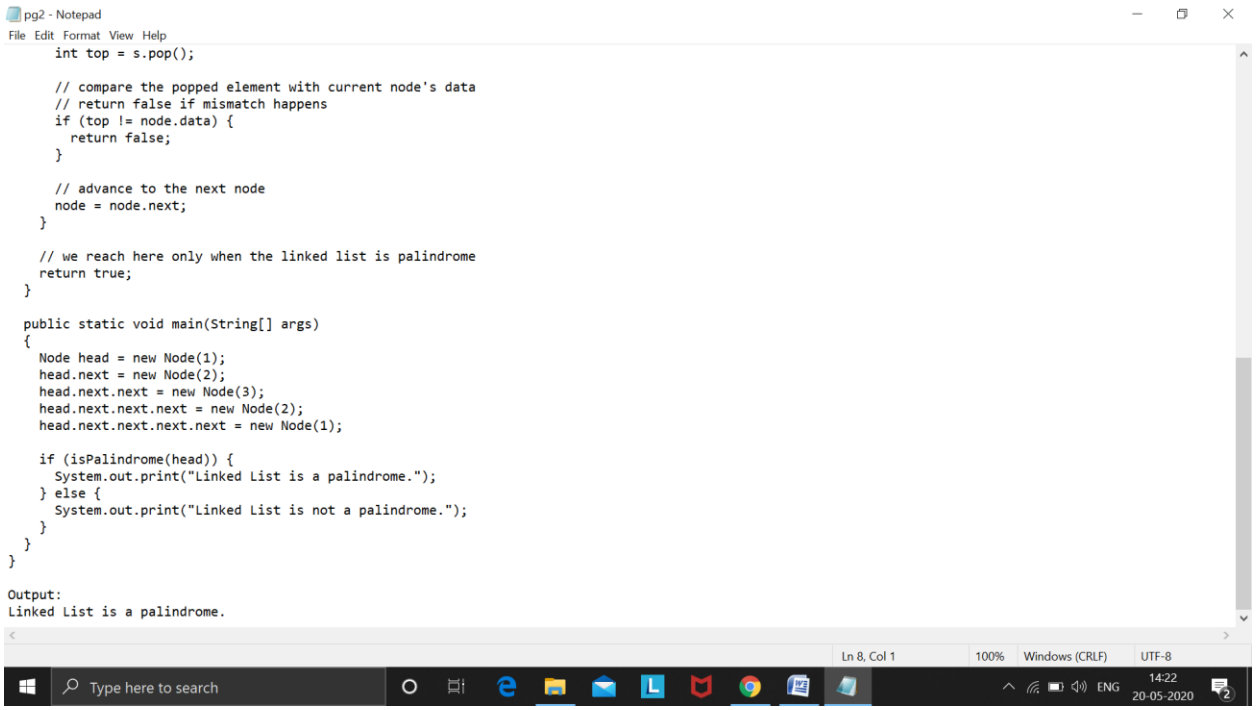
pg2 - Notepad
File Edit Format View Help
int top = s.pop();
// compare the popped element with current node's data
// return false if mismatch happens
if (top != node.data) {
return false;
}
// advance to the next node
node = node.next;
}
// we reach here only when the linked list is palindrome
return true;
}
public static void main(String[] args)
{
Node head = new Node(1);
head.next = new Node(2);
head.next.next = new Node(3);
head.next.next.next = new Node(2);
head.next.next.next.next = new Node(1);
if (isPalindrome(head)) {
System.out.print("Linked List is a palindrome.");
} else {
System.out.print("Linked List is not a palindrome.");
}
}
}
Output:
Linked List is a palindrome.
Ln 8, Col 1
100%
Windows (CRLF)
UTF-8
Type here to search
ENG
14:22
20-05-2020