DAILY ONLINE ACTIVITIES SUMMARY

Date:	**19-05-2020**	**Name:**	**Rani M.D**
Sem & Sec	**6th sem & B sec**	**USN:**	**4AL17Cs075**

Online Test Summary

Subject	**Computer Graphics and Visualization**		
Max. Marks	**60**	**Score**	**54**

Certification Course Summary

Course	**Machine Learning with python**		
Certificate Provider	**Cognizant class**	**Duration**	**10 hours**

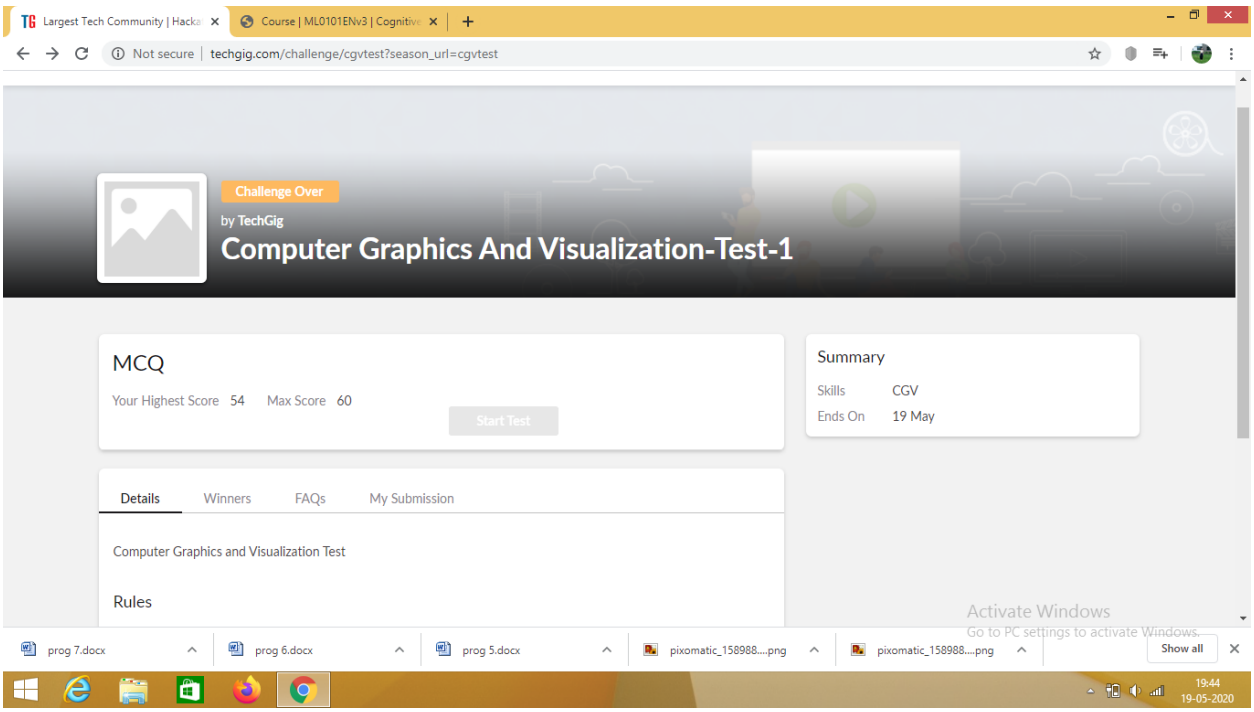
Coding Challenges

Problem Statement: 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.
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.

3.A user will input two strings, and we find if one of the strings is a sub sequence of the other. Program prints “yes” if either the first string is a sub sequence of the second string or the second string is a sub sequence of the first string.
Assume that, the length of the first string is smaller than or equal to the length of the second string.

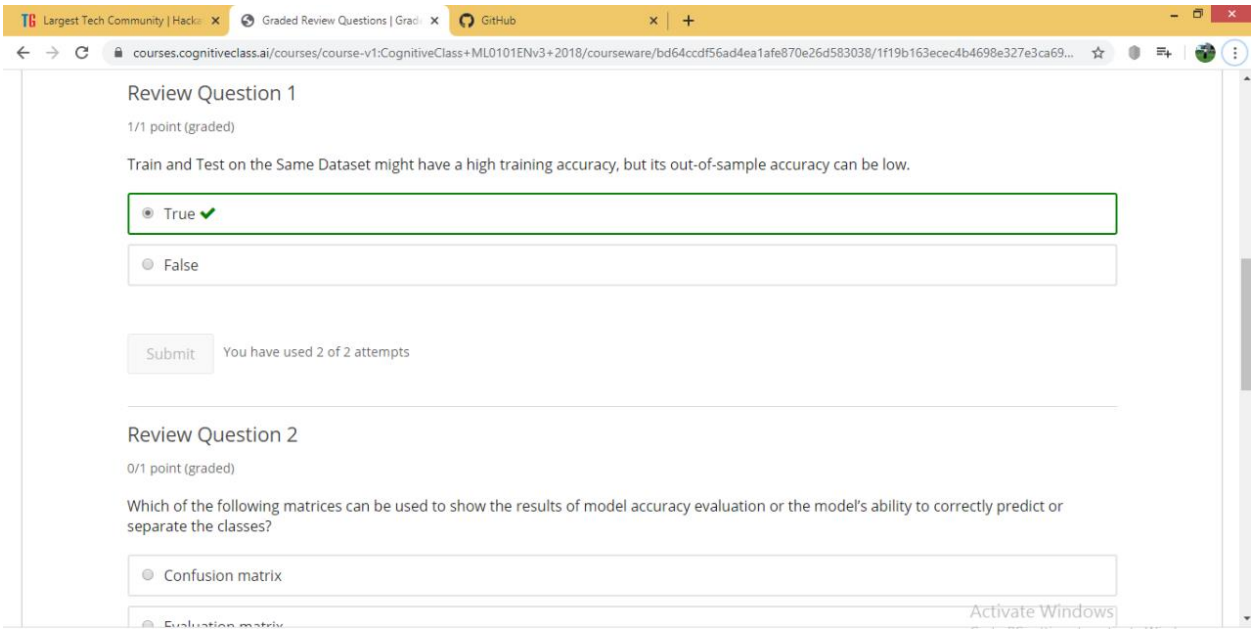
Status: DONE	
Uploaded the report in Github	**YES**
If yes Repository name	**DAILY STATUS,QUARENTINE CODING,PYTHON CERTIFICATION COURSE**
Uploaded the report in slack	**YES**

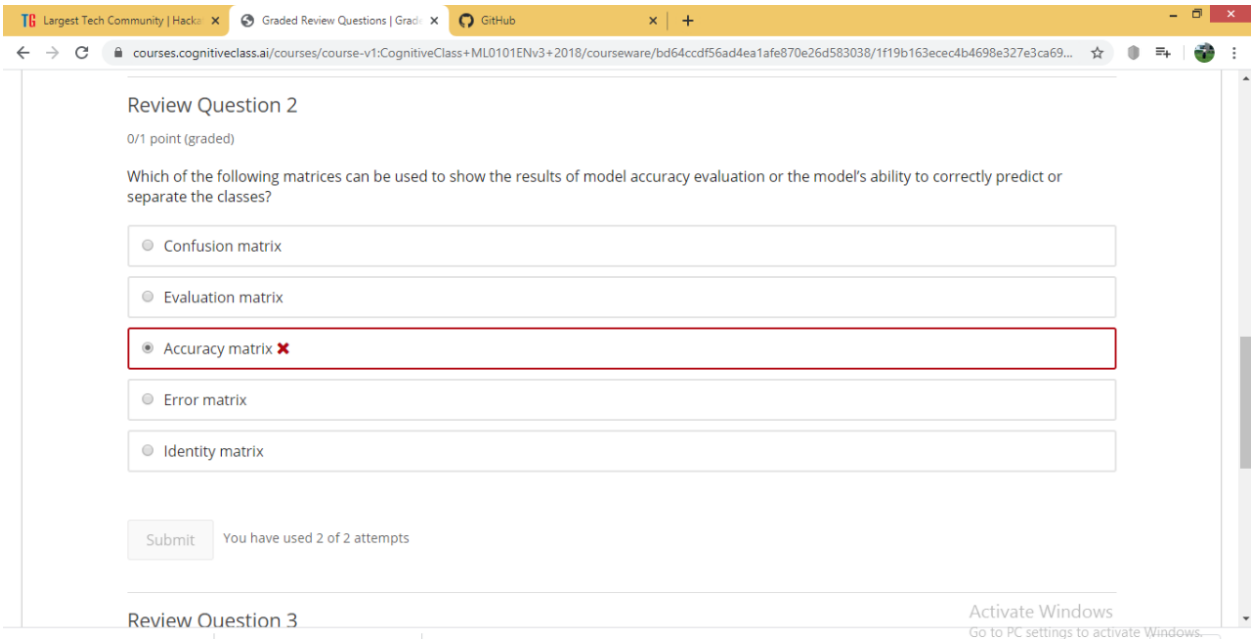
Online Test Details: (Attach the snapshot and briefly write the report for the same)



CGV test was held today i.e 19-05-2020. The maximum marks was for 60 marks. Out of which I got 54 marks

Certification Course Details: (Attach the snapshot and briefly write the report for the same)


Largest Tech Community | Hacke
Graded Review Questions | Grad
GitHub
courses.cognitiveclass.ai/courses/course-v1:CognitiveClass+ML0101ENv3+2018/courseware/bd64ccdf56ad4ea1afe870e26d583038/1f19b163ecec4b4698e327e3ca69...
Review Question 1
1/1 point (graded)
Train and Test on the Same Dataset might have a high training accuracy, but its out-of-sample accuracy can be low.
True
False
Submit
You have used 2 of 2 attempts
Review Question 2
0/1 point (graded)
Which of the following matrices can be used to show the results of model accuracy evaluation or the model's ability to correctly predict or separate the classes?
Confusion matrix
Activate Windows


Largest Tech Community | Hacke
Graded Review Questions | Grad
GitHub
courses.cognitiveclass.ai/courses/course-v1:CognitiveClass+ML0101ENv3+2018/courseware/bd64ccdf56ad4ea1afe870e26d583038/1f19b163ecec4b4698e327e3ca69...
Review Question 2
0/1 point (graded)
Which of the following matrices can be used to show the results of model accuracy evaluation or the model's ability to correctly predict or separate the classes?
Confusion matrix
Evaluation matrix
Accuracy matrix
Error matrix
Identity matrix
Submit
You have used 2 of 2 attempts
Review Question 3
Activate Windows
Go to PC settings to activate Windows.

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courses.cognitiveclass.ai/courses/course-v1:CognitiveClass+ML0101ENv3+2018/courseware/bd64ccdf56ad4ea1afe870e26d583038/1f19b163ecec4b4698e327e3ca69...

Submit You have used 2 of 2 attempts

Review Question 3

1/1 point (graded)

When we should use Multiple Linear Regression?

- (•) When we would like to identify the strength of the effect that the independent variables have on a dependent variable. ✔
- ( ) When there are multiple dependent variables.

Submit You have used 1 of 1 attempt

Previous Next

Largest Tech Community | Hacke | Evaluation Metrics in Regression | GitHub

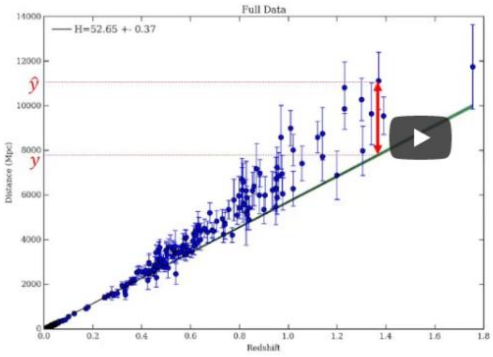
courses.cognitiveclass.ai/courses/course-v1:CognitiveClass+ML0101ENv3+2018/courseware/bd64ccdf56ad4ea1afe870e26d583038/7fef1013c5394c83b42f8a9a88c46...

Evaluation Metrics in Regression (3:06)

ML0101EN v3 - Evaluation Metrics in Regression Models 3:06

Watch later Share

What is an error of the model?



$$MAE = \frac{1}{n}\sum_{j=1}^{n}|y_j - \hat{y}_j|$$

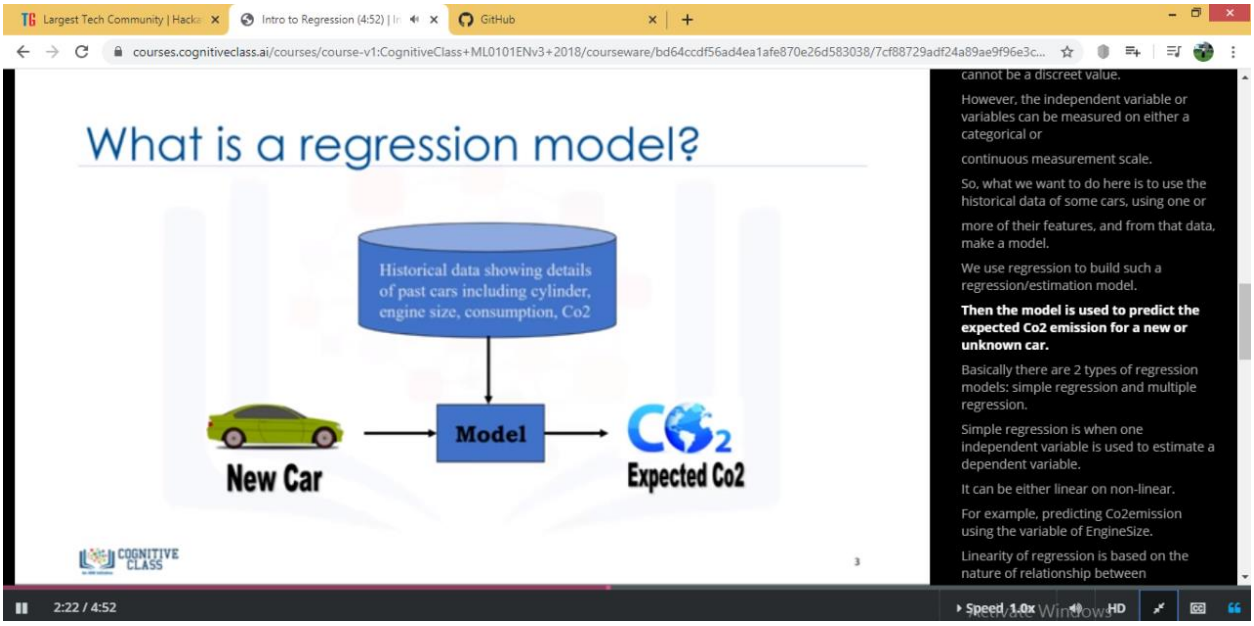
$$MSE = \frac{1}{n}\sum_{i=1}^{n}(y_i - \hat{y}_i)^2$$

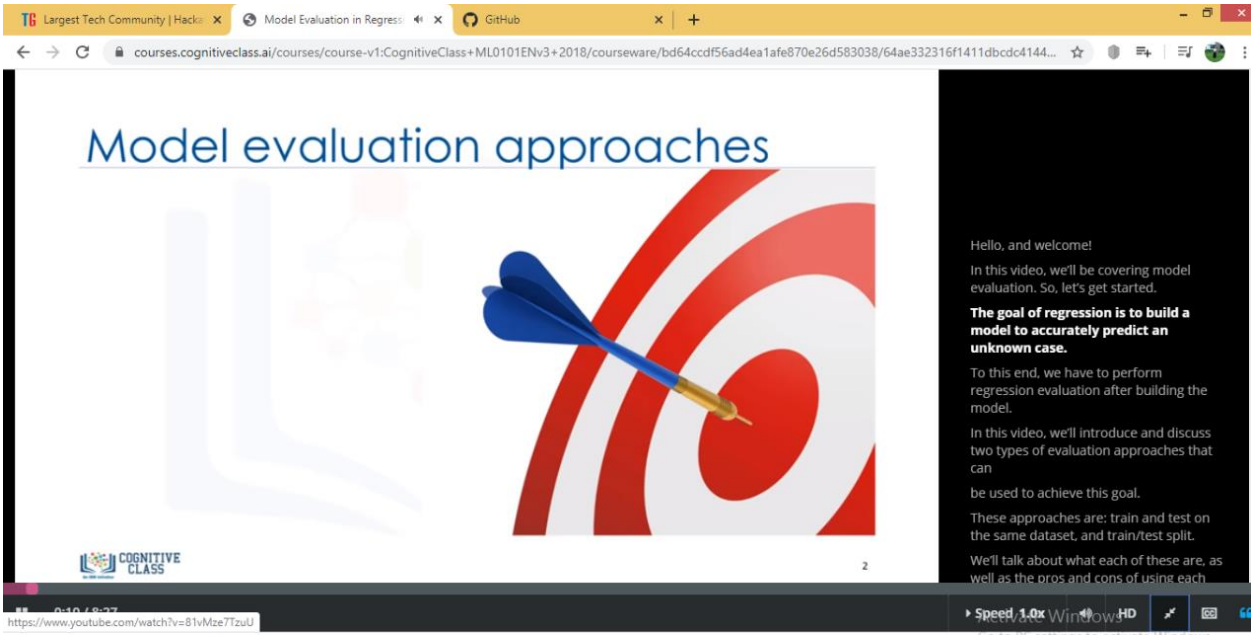
$$RMSE = \sqrt{\frac{1}{n}\sum_{j=1}^{n}(y_j - \hat{y}_j)^2}$$

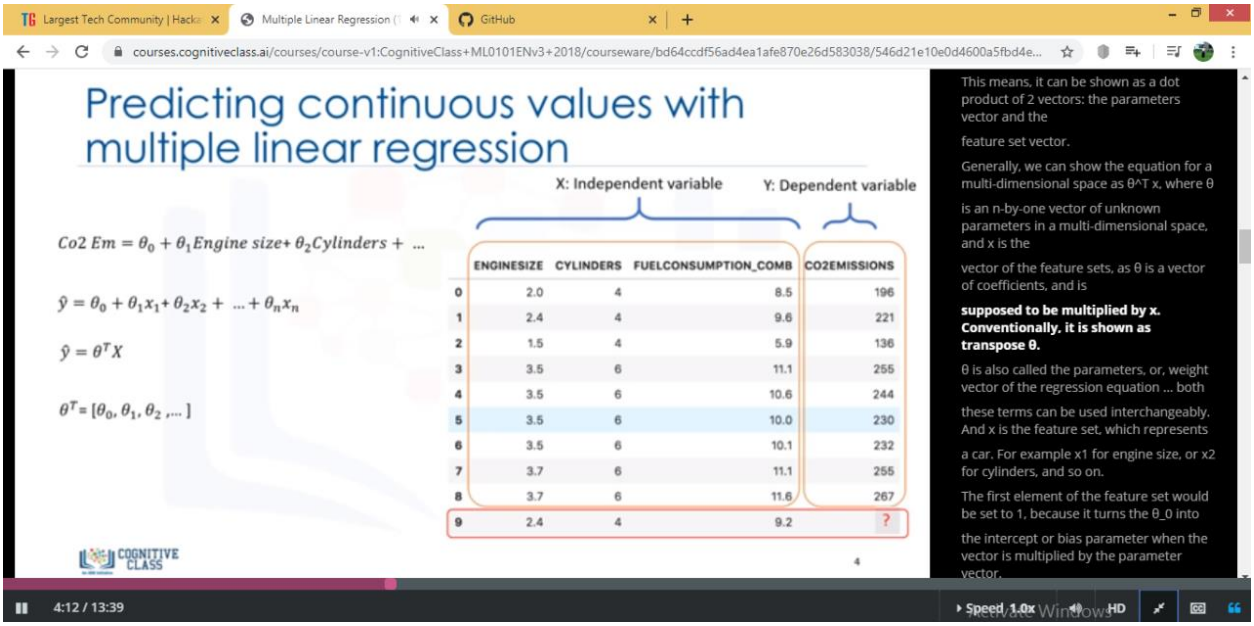
$$RAE = \frac{\sum_{j=1}^{n}|y_j - \hat{y}_j|}{\sum_{j=1}^{n}|y_j - \bar{y}|}$$

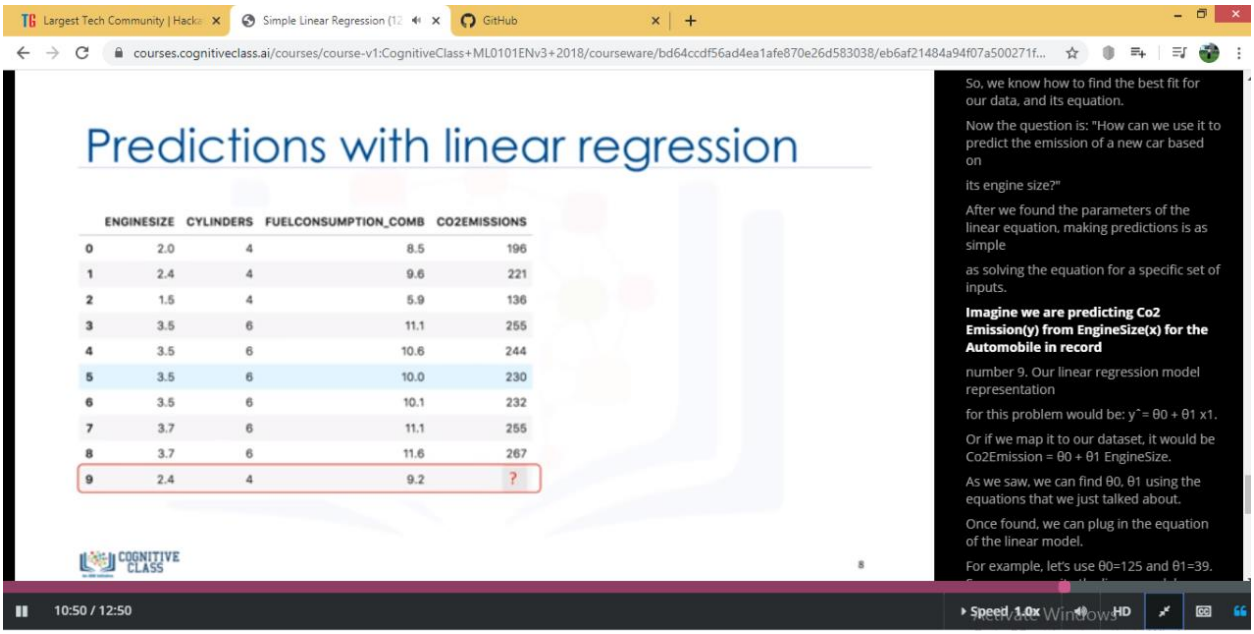
$$RSE = \frac{\sum_{j=1}^{n}(y_j - \hat{y}_j)^2}{\sum_{j=1}^{n}(y_j - \bar{y})^2}$$

COGNITIVE


What is a regression model?
Historical data showing details of past cars including cylinder, engine size, consumption, Co2
Model
New Car
Expected Co2
COGNITIVE CLASS
3
cannot be a discreet value.
However, the independent variable or variables can be measured on either a categorical or
continuous measurement scale.
So, what we want to do here is to use the historical data of some cars, using one or
more of their features, and from that data, make a model.
We use regression to build such a regression/estimation model.
Then the model is used to predict the expected Co2 emission for a new or unknown car.
Basically there are 2 types of regression models: simple regression and multiple regression.
Simple regression is when one independent variable is used to estimate a dependent variable.
It can be either linear on non-linear.
For example, predicting Co2emission using the variable of EngineSize.
Linearity of regression is based on the nature of relationship between
2:22 / 4:52
Speed 1.0x
HD


Model Evaluation in Regress
courses.cognitiveclass.ai/courses/course-v1:CognitiveClass+ML0101ENv3+2018/courseware/bd64ccdf56ad4ea1afe870e26d583038/64ae332316f1411dbcdc4144...
Model evaluation approaches
COGNITIVE CLASS
2
Hello, and welcome!
In this video, we'll be covering model evaluation. So, let's get started.
The goal of regression is to build a model to accurately predict an unknown case.
To this end, we have to perform regression evaluation after building the model.
In this video, we'll introduce and discuss two types of evaluation approaches that can
be used to achieve this goal.
These approaches are: train and test on the same dataset, and train/test split.
We'll talk about what each of these are, as well as the pros and cons of using each
Speed 1.0x
HD
https://www.youtube.com/watch?v=81vMze7TzuU



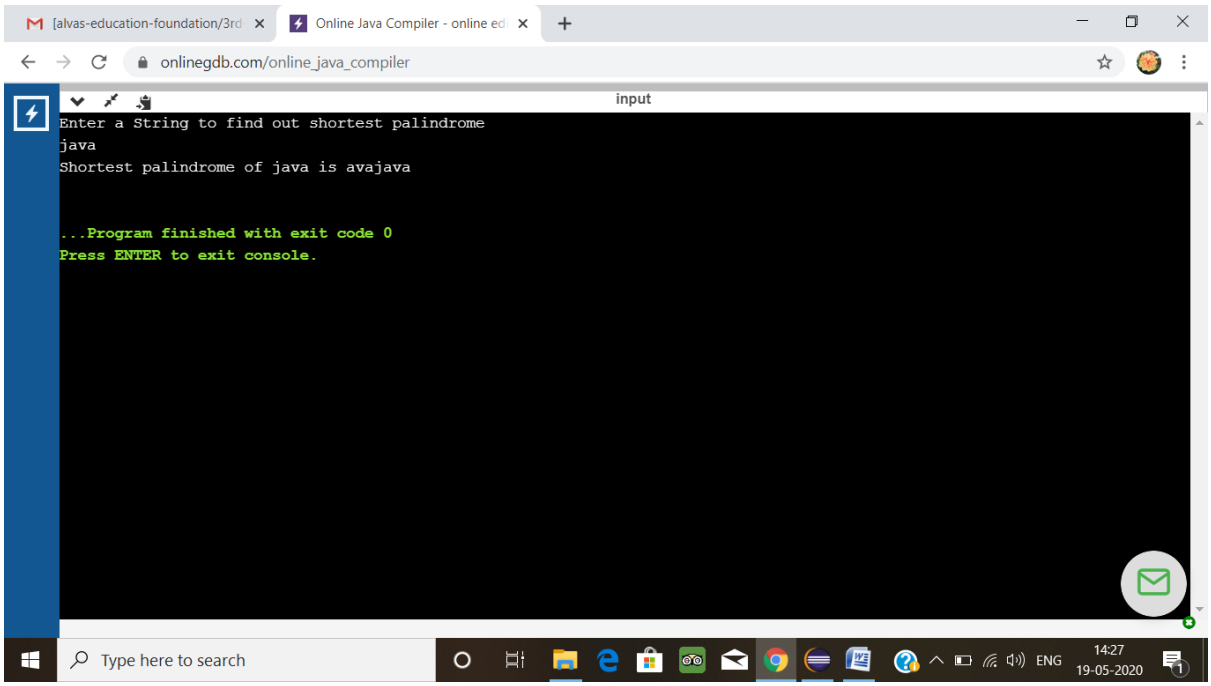


DAY 2 (19-05-2020)-Intro to Regression ,Simple Linear Regression ,Multiple Linear Regression ,Model Evaluation in Regression Models ,Evaluation Metrics in Regression ,Non-Linear Regression ,Graded Review Questions ARE COMPLETED

Coding Challenges Details: (Attach the snapshot and briefly write the report for the same)

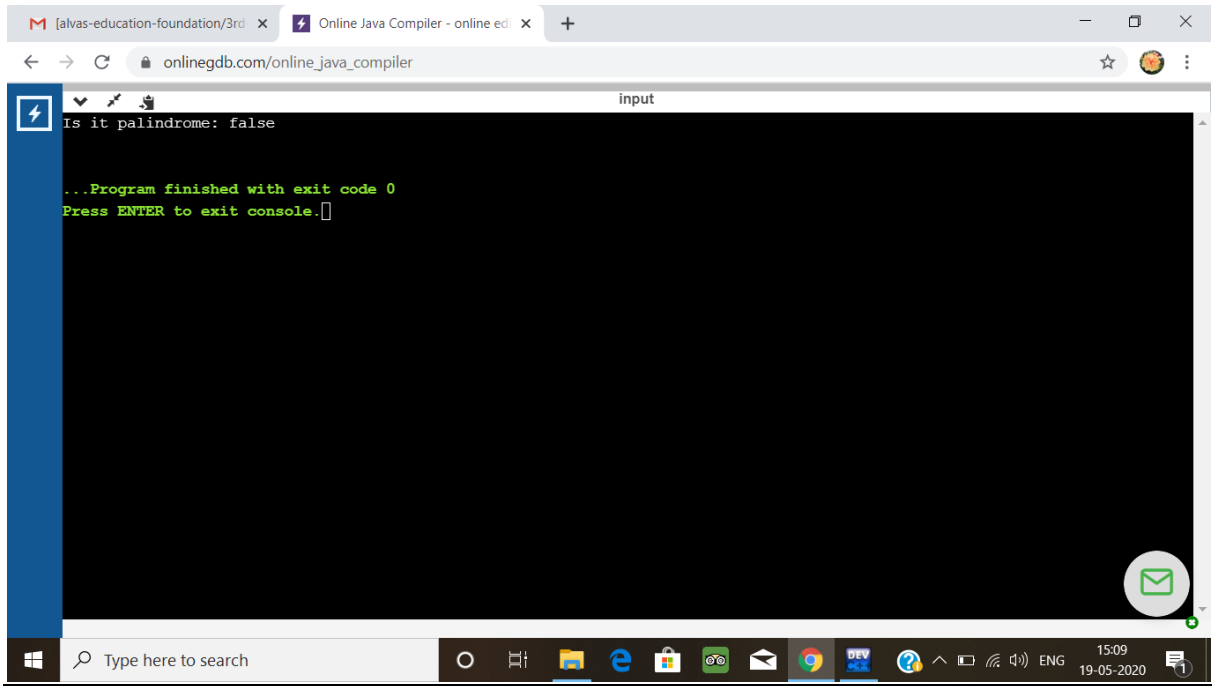
1. We have a Letter or a word then we need add some letters to it and need to find out shortest palindrome
For example we take "S": S will be the shortest palindrome string.
If we take "xyz": zyxyz will be the shortest palindrome string
So we need to add some characters to the given string or character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

```
import java.util.*;

public class Main{

 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();

 System.out.println("Shortest palindrome of "+str+" is "+shortestPalindrome(str));

 }
```


[alvas-education-foundation/3rd
Online Java Compiler - online ed
onlinegdb.com/online_java_compiler
input
Enter a String to find out shortest palindrome
java
Shortest palindrome of java is avajava
...Program finished with exit code 0
Press ENTER to exit console.
Type here to search
ENG
14:27
19-05-2020

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.

```
import java.util.Stack;

 public class Main {

 public static void main(String[] a){

 Node n1 = new Node(10);

      Node n2 = new Node(28);

      Node n3 = new Node(15);

      Node n4 = new Node(29);

      Node n5 = new Node(10);

      n1.next = n2;

      n2.next = n3;

      n3.next = n4;

      n4.next = n5;

      boolean result = isPalindrome(n1);

      System.out.println("Is it palindrome: "+result);

   }

 static class Node {

      int data;

      Node next;

      Node(int tmp) {

         data = tmp;

      }

   }
```



3.A user will input two strings, and we find if one of the strings is a sub sequence of the other. Program prints “yes” if either the first string is a sub sequence of the second string or the second string is a sub sequence of the first string.

Assume that, the length of the first string is smaller than or equal to the length of the second string.

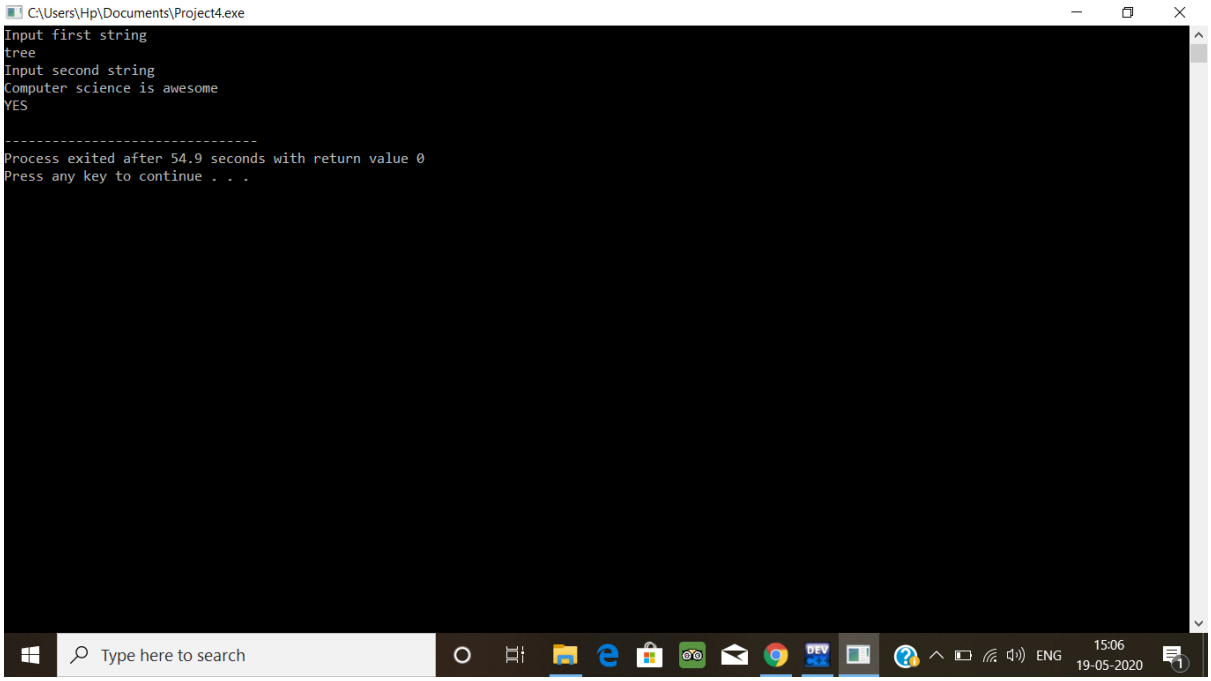
An expected output of the program:

Input the first string
tree
Input the second string
Computer science is awesome
YES

```
#include <stdio.h>
#include <string.h>
int check_subsequence (char [], char[]);

int main () {
  int flag;
  char s1[1000], s2[1000];

  printf("Input first string\n");
  gets(s1);
```

```
  printf("Input second string\n");
  gets(s2);

  if (strlen(s1) < strlen(s2))
    flag = check_subsequence(s1, s2);
  else
    flag = check_subsequence(s2, s1);

  if (flag)
    printf("YES\n");
  else
    printf("NO\n");

  return 0;
}

int check_subsequence (char a[], char b[]) {
  int c, d;

  c = d = 0;

  while (a[c] != '\0') {
    while ((a[c] != b[d]) && b[d] != '\0') {
      d++;
    }
    if (b[d] == '\0')
      break;
    d++;
    c++;
  }
  if (a[c] == '\0')
    return 1;
  else
    return 0;
}
```

output


C:\Users\Hp\Documents\Project4.exe
Input first string
tree
Input second string
Computer science is awesome
YES

Process exited after 54.9 seconds with return value 0
Press any key to continue . . .
Type here to search
ENG
15:06
19-05-2020