A

MINI PROJECT SYNOPSIS

ON

NEED FOR SPEED

SUBMITTED BY

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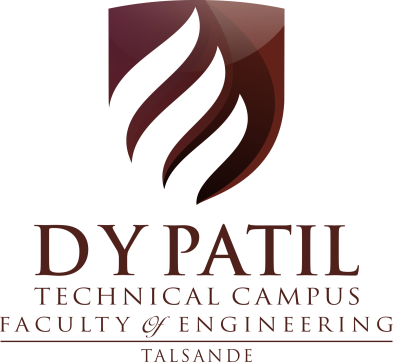
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**PROBLEM STATEMENT**

The needle of speedometer has placed in wrong direction. So that the speedometer reads wrong speed.

**INTODUCTION**

1. In this ‘Need for Speed’ problem we have to given a fix distance and a particular time, we need to calculate the exact speed of the vehicle.
2. Catch about this problem is that the needle of the speedometer is broken.
3. We have to check exact speed of an vehicle from given input

**OBJECTIVE**

* To calculate the exact speed covered by that vehicle for a given segment.

**SCOPE OF THE PROJECT**

* It helps to calculate error of that speedometer.
* Using this code we can find difference between actual speed and the one display by the speedometer when needle of the speedometer fell off.

**LANGUAGE TO BE USED**

* C++ Programming Language.

**METHODOLOGY**

**Input:**

First row contain no of section of journey (N) and total time (T) (hour). From second row ith column contain distance traveled in each section (in miles), and jth column contain speed on speedometer (miles per hour)

**Output:**

Display the error in speed read by speedometer. (miles per hour).

**Example First:-**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **INPUT**   |  |  | | --- | --- | | **3** | **5** | | **4** | **-1** | | **4** | **0** | | **10** | **3** | | **OUTPUT**  **3.00000000** |

**ALGORITHM**

* Step 1: Start
* Step 2:- Set Number of section “N” and total time “T”.
* Step 4:- Set minimum value and maximum value for the range of “t”.
* Step 4:- Set distance for “N” sections.
* Step 5:- Set Speed for “N” sections.
* Step 6:- For(mx-mn> 1e-6),Repeat step 7
* Step 7 :- Calculate t by using the initially set formulae

Set initially t = 0;

t = d[i] / s[i] + c;

If (t<T), mx = c;

If (t>T), mn = c;

* Step 6:- Display (mx+mn/2)

**SOFTWARE/HARDWARE REQUIREMENT**

**Software requirement**

Operating system: Windows 7 or later versions

Programming Language used: C++

**Hardware requirement**

Processor: Intel core i3 or above

Hard disk: 500 GB

RAM: 2GB

**FUTURE SCOPE**

* To get accuracy in industrial work where speedometer is used.
* Using this project, we calculate Time error and Speed Error.

**CONCLUSION**

* By this Mini project we successfully calculated the difference between actual speed and the one display by the speedometer.
* Thus we conclude how to find error of speedometer.

**REFERENCE**

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