

Question1: A transportation company owns several cars and wants to calculate the driving range for each car based on its fuel tank capacity and fuel efficiency.

Write a Java program that starts by asking the user to enter the number of cars. Then use a loop to get the values of **tankCapacity** and **milesPerGallon** for each car.

1. Ask the user to enter the **number of cars**.
2. If the entered number is zero, print the following message: **"You inserted a zero, bye"**, then exit the program.
3. Otherwise: Use a **loop** to read the required values for each car from the user.
4. Calculate the **driving range** for each car using the formula:

$$\text{Driving range} = \text{tankCapacity} \times \text{milesPerGallon}$$
5. Print the driving range for each car.

Notes: Assume that the car travels at a constant speed and that fuel efficiency remains consistent throughout the driving range.

For example, if the input number of cars is 1, we should see an output as follows:

```
Please enter the number of cars: 1
Please enter the capacity of the tank: 15
Please enter the miles per gallon: 25
This means the car can drive 375 miles on a full tank.
```

5.25

import java.util.Scanner;

class Test {

public static main void (String[] args) {

Scanner input = new Scanner(System.in);

int num = 1;
num = input.nextInt();

if (num == 0) {
 System.out.println("You inserted a zero, bye");
 else if (num > 0) {

Driving range = tankCapacity * milesPerGallon;
 System.out.println("Driving " + range + " for each car");

Capacity = 15;
 milesPerGallon = 25;

if ← 3
 else ← 3

0.75
 1.25

0.5

1.25

0.5

double