

Nyabihu District

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Term I CAT 2 Year II

Total Marks: 20 **Duration**: 90 min

INSTRUCTIONS:

- 1. Make Sure that you submit a compiling and running program, otherwise you are bellow average marks.
- 2. Submit on time through this Email: mashodot@gmail.com
- 3. The program should be submited in a single Text file named: [Your_full_names]_CarRentals.txt, do not submit packages/directories just a file.
- **4.** Who ever fails to well mension his names in the file may lose some marks.

INSTRUCTOR: MASENGESHO Donatien

CAT TWO OF OBJECT ORIENTED PROGRAMMING WITH JAVA

Q1. Car Rentals

Given the pricing table below; write a program that will receive two dates(from and to) ,the customer names as user inputs and compute the total required amount to keep a car at customer disposal for the specified period based on car type and days of the week then generate an invoice for the specified customer.

The price is fixed per day through Monday to Sunday; 0.18 VAT tax is applicable for all days' costs, except on Sunday.

Wednesday is a bonus day for everyone on all car types and it is subject to 0.05 income tax on each invoice to the customer based on the lowest price for the car type across all days of the week if the occupation period includes some Wednesdays; by the pricing table below.

Note:

- 1. A customer is allowed to borrow more than one vehicle types and one vehicle type can be borrowed more than once by the same customer for the same rental period, ie. on the same Invoice.
- 2. Your invoice is to be saved in a text file named "**invoice.txt** " in the current directory with the format/design of your choice.

Pricing Table.

| Nr. | Car Type | Monday | Tuesda y | Thursd ay | Friday | Saturd ay | Sunday |
|-----|----------|--------|-------------|-----------|--------|--------------|--------|
| 1. | SEDAN | 10000 | 5000 | 15000 | 9350 | 8400 | 8400 |
| 2. | COUPE | 12000 | 8500 | 13500 | 7460 | 8400 | 8000 |
| 3. | MINIVAN | 7500 | 350 | 11000 | 5600 | 8400 | 8000 |

Good Luck!