****

**Al-Isra University**

**Faculty of IT**

**Department of Computer Science**

**جــامـعـة الإسراء**

**كـليـة تكـنولوجيـا المعلومـات**

**قـســم هندسة البرمجيات**

|  |  |  |
| --- | --- | --- |
| **Department:**  SE | **Assignment:**  **#2** | **Date:** |
| **Semester:**  Second | **Year**:  2024 | **Instructor**  Dr. Dimah Fraihat |
| **Course No.:** | **Course Name:**  Software Testing | **Section:**  1 |
| **Student No.:**  **AB1199** | **Student Name:**  **حمزة خالد مسلم** | **Submission date:**  10 / 05 / 2024 |

|  |  |  |
| --- | --- | --- |
| Question No. | Mark | |
| Max | Score |
| 1 | **20** |  |
| **Total Mark** | **20** |  |

**Note: 1- Copy and paste are prohibited**

The New ordering company has the following rate structure for ordering based on time:

* Any order started at or after 8:00 p.m. (20:00) but before 8:00 a.m. (08:00) is discounted 50%.
* Any order started at or after 8:00 a.m. (08:00) but before 8:00 p.m. (20:00) is charged full price.
* All orders are subject to a 5% tax.
* The regular rate for an order is $1 per item.
* Any order take longer than 60 minutes in rush houres receives a 10 % extra on its cost.

A computer program reads the start time for an order based on a 24-hour clock and the time needed for distination. The overall cost (before any discounts or tax) is printed followed by the net cost (after discounts are deducted and tax is added).

The program will assume only whole number values are input.

Q# Write a complete set of Black Box test cases (equivalence classes and boundary value) based on decision table technique for testing of the program which solves the problem above.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Scenario | Start Time | Duration | Rush Hours | Output |
| 1 | 8:00PM =< Start Time < 8:00AM | < 60 minutes | Yes | 5% tax, discounted 50%, |
| 2 | 8:00AM =< Start Time < 8:00PM | < 60 minutes | Yes | 5% tax, |
| 3 | 8:00PM =< Start Time < 8:00AM | < 60 minutes | No | 5% tax, discounted 50%, |
| 4 | 8:00AM =< Start Time < 8:00PM | < 60 minutes | No | 5% tax, |
| 5 | 8:00PM =< Start Time < 8:00AM | >= 60 minutes | Yes | 5% tax, discounted 50%, 10 % extra on its cost |
| 6 | 8:00AM =< Start Time < 8:00PM | >= 60 minutes | Yes | 5% tax, 10 % extra on its cost |
| 7 | 8:00PM =< Start Time < 8:00AM | >= 60 minutes | No | 5% tax, discounted 50%, |
| 8 | 8:00AM =< Start Time < 8:00PM | >= 60 minutes | No | 5% tax, |