

UNIVERSITY OF SWAZILAND
RESIT / SUPPLEMENTARY EXAMINATION, JULY 2017

Title of the Paper : STRUCTURED PROGRAMMING – II /
COMPUTER PROGRAMMING - II
Course Number : CS244 / CSC213
Time Allowed : Three (3) Hours

Instructions: This exam has pages from 1 to 3. The **Examination userid, password, tree, context and server name** will be provided by the chief invigilator.

1. Write file specifications of all the files in the root of your network drive F:\ in your folder.
2. Submit folder with pseudo codes, signed listings of programs and report files.
3. Use the last 10 minutes to print / check the submissions (file specifications, pseudo codes, signed listings of your programs and report files)

Read the paper carefully and completely before starting to work on the problem.

The names of program and report files should be –

----- .cpp (Program file) and
----- .TXT (Report file)

The dashes in file names are six digits of your UNISWA id.

Special requirements: For each student

1. A networked PC with working C++ system.
2. An accessible secure network disk (F:\) & Printing facility.

This paper should not be opened until permission has been granted by the invigilator.

MARKING SCHEME: Pseudo code (30 %), Program (50 %), Report file (20 %),\

PROBLEM: Information about monthly sales of agents of MANZINI FURNISHERS is given in a text file 'F:\SUPD2016.TXT'. Each record of this file has the following -

Agent Name	15 characters (surname space other names)
Agent Id	6 digits - long integer
Count of orders	2 digits - integer
Sales Amount	Floating (6 digits before decimal, 2 digits after decimal)

Each field has been separated by a space character and Agent Id in sentinel record is zero.
Example of a record -

```
BENNET L.A.      120786 35 182270.00
```

Write pseudo code and a corresponding well documented and properly indented C++ program that does the following -

1. Reads in all the data from 'F:\SUPD2016.TXT'.
2. Computes the Commission for each agent and displays the information on a report file ('----- .TXT').
3. The six dashes in the report file name are six digits of your UNISWA id number.

NOTES:

1. Commission is computed by adding the base commission (BC) and performance commission (PC).
2. The base commission (BC) is 5 times the count of orders only if count of orders is greater than 5, it is zero otherwise.
3. The performance commission (PC) is computed as follows -
 - PC is 25% of the sales amount if sales amount is 10000 or more,
 - PC is 15% of the sales amount if sales amount is above 5000, but below 10000,
 - PC is 10% of the sales amount if sales amount is 5000 or below and
 - PC is zero if sales amount is 1000 or below.
4. The tax is 30 % of the commission.
5. A function should be declared to find the commission using count of orders and sales amount as parameters.

6. The contents of 'F:\SUPD2016.TXT' are -

DLAMINI ERIC	100044	03	10100.00
SHONGWE L.A.	120785	05	18227.00
BENNET L.A.	120786	37	50601.50
THWALA D.M.	120251	04	14321.50
BEATRIC S.P.	120786	14	26500.00
DVUBA M.	120197	25	60059.00
SIBISI J.N.	120630	18	18560.00
VILAKATI K.	120246	10	15410.00
SISA D.M.	120240	16	80800.00
SENTINEL DATA	000000	00	00000.00

The report lay out should be -

REPORT PRODUCED BY THE PROGRAM OF <YOUR UNISWA ID>

MANZINI FURNISHERS, SWAZILAND
SALES AGENTS COMMISSION REPORT, JULY 2017

```

=====
ID      NAME                ORDER SALES      CCMMISSION    TAX
                COUNT AMOUNT
=====
-----
-----
-----
=====

```

SUMMARY

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```

COUNT OF ALL ORDERS = ----
COUNT OF AGENTS    = ----
TOTAL SALES AMOUNT  = -----.--
TOTAL COMMISSION    = -----.--
TOTAL TAX           = -----.--

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<END OF EXAMINATION PAPER>