This is an individual Project and you are expected to work independently.

You may verbally discuss the general approach to solving individual Lab or Project with other students. And that is the only extent collaboration allowed for individual Labs and Projects. You are not allowed to work together, you are not allowed to share or read others code/deliverables. If your code or any other deliverables for an individual Lab or Project resemble with those of another student, you will be reported to Academic Integrity Office for plagiarism investigation. When found plagiarized, if this is your first offence, then it will result in zero grade for the assignment, if this is the second offence (Note: those in the past in this or any other courses are counted as well) then will result in Fail Grade for CST8283. If this is your third offence (Note: those in the past in this or any other courses are counted as well), then it could result in your removal from the program of study

Your submission must include the following:

1) The listing of your program code (executable form in COBOL);
2) The list of your program code in as a .txt file.
3) A copy of the created files using the test data provided in this document
4) A screen capture as a pdf file of one of the screens from your program execution
5) Your Function or Hierarchy Charts as pdf files.
6) Your Flowcharts as pdf files.

Do not submit the deliverables in a zip file. All files should be submitted as standalone. Failure to follow submission instruction will result in deduction up to 25%

Program Requirements
   A program is required to write Employee data to an external file from the data fields entered at the keyboard.
   Five data fields are to be entered at the keyboard. The structure of the Employee Record is given below (see Employee Record Format).
   As each data field is entered, it should be preceded by a prompt for that field.
   A decision is required as to whether a record is to be entered. Therefore a prompt and response is required. The answer to that prompt will determine whether the process to enter data and write the record is to be executed. (Hint – that prompt and response should be made during the Initialization routine and as the last routine in the mainline).

Once all the records are written in the file, open the file as an **input** file in the same program, read the records and display to the screen as shown below only for those employees with at least 5 years of service:

Employee ID	Dept	First Name	Last Name	Service Years
654321	123	Sheela	Franks	021
111222	321	Laks	Kumaran	035

Employee Record Format
The record format for the Employee Record to be written to the file is described below.
Please note that no formatting or editing of the output fields is to be made.

Employee ID	**6 bytes numeric**
Department Code	**3 bytes numeric**
Last Name	**20 bytes alphabetic**
First Name	**20 bytes alphabetic**
Years of Service	**2 bytes numeric**

When you run the program, you must use the test data provided below in **Test Data**
Your program code should include meaningful prompts for each of the five data fields to
be entered and for the prompt whether a record is to be entered. All data fields should
have meaningful names. Refer to the document on Standards in the Hybrid/Online
content area in Brightspace.

Test Data

You must use the test data shown below for the three records to be entered at the keyboard and written to the file. There is to be no editing or formatting of the data to be written to the file.

Please note that testing data is shown here on multiple lines for readability. However, when written to the output file a student record would show on one line in the output file. Also note that output files are usually not for human browsing. Therefore, do not include white spaces in output files as these takes up space in storage.

Employee ID:123456

Department Code:011

First Name:David

Last Name:Silverman

Years of Service:3

Employee ID:654321

Department Code:123

First Name: Sheela

Last Name:Franks

Years of Service:21

Employee ID:111222

Department Code:321

First Name: Laks

Last Name:Kumaran

Years of Service:35

Marking Scheme (as applicable)

Refer to Notes Regarding Grading below for specific points that will be checked and influence the marks allocated.

Output format and content	___	/ 20
Program listing	___	/ 50
Documentation	___	/ 30
TOTAL	**____**	**/ 100**

Notes Regarding Grading

The **program listing** will be examined primarily for:

1) relationship to function chart and flowchart;
2) use of prescribed commands as required by the problem specifications;
3) application of standards and structures;
4) use of proper functional constructs (cohesion and coupling);
5) use of internal comments;
6) successful compilation and execution.

The **output reports (hard copy or screen displays if required)** will be examined for accuracy of the output information and the prescribed format as noted in the program requirements (Output Record Structure).

The **documentation** will be examined to ensure:

1. proper use of symbols and logical diagrams/narratives (i.e. flowcharts);
2. proper structure and content of structure/function/hierarchy charts;
3. clear and accurate report or screen layouts (if required);
4. clear description or comments of the program logic; and, relationship to the program code.

Any violation of the established standards (Standards document in the Hybrid/Online content area of Brightspace) will result in a loss of at least 5 points.
Any discrepancy regarding the grading notes above will result in a loss of at least 5 points.