GET 433

Final Exam

Spring 2016

***1. For each of the following, determine the number of bytes reserved in the WORKING-STORAGE SECTION:***

a. PIC X(13) VALUE SPACES. 13

b. PIC S9(9) VALUE 0. 9

c. PIC 9(4) COMP. 32

d. PIC 9(7) COMP-3. 4

e. 01 FILLER. 19

05 FLDA PIC X(3).

05 FLDB PIC X(16).

***2. What is a CICS Map and how is it used to communicate information to a terminal (3270 device)?***

The CICS map it is a screen that contain fields to receive data from the users and display the result of the processing. The terminal control provides the interface between CICS and the operating system’s telecommunication access method, while the basic mapping support (BMS) provides the interface between application programs and terminal control.

***3. What are the advantages and disadvantages of using a VSAM indexed file as input into a VSAM program?***

There is no fragmentation when using VSAM files and the data can be accessed faster due to VSAM dataset organization, but VSAM files require more storage because VSAM datasets carry control information in them

***4. Why would you use an index or subscript in a COBOL program? Which would you prefer and why?***

The index and subscript are used to access the elements in a table. I prefer the subscript because it is easier to debug.

***5. Describe what a PERFORM statement does in COBOL and how you could regulate the number of iterations.***

The PERFORM command transfers control to one or more statements and returns control to the next executable statement, it is possible regulate the number of iterations using the perform until

***6. Before you can execute a COBOL program with embedded DB2 SQL, you must go through a three step process. Name and describe the three steps.***

Precompile: The DB2 precompiler prepares SQL statements and prevent compiler errors. The output from the precompiler is a database request module (DBRM), a data set that contains SQL statements. The purpose of a DBRM is to communicate the SQL requests to DB2 during the bind process.

Bind: BIND does three things: checks your syntax for errors; checks authorization and determines the access paths for the statements.

Compile, link-edit: the link-edit procedure builds an executable load module that satisfies the requirements of the environment

***7. When testing a CICS program, describe what the NEWC command does. Also, for what is the CEDF function used?***

The NEWC loads a new copy of a program into the CICS region. The CEDF is used to debug COBOL programs.

***8. Write the JCL needed to output a new file from a COBOL program in the zOS operating system (SUS00nn.GET433.LABX.OUTPUT).***

//OFILE DD DSN=SUS0041.GET433.LABX.OUTPUT,

// DISP=(NEW,CATLG,DELETE),

// DCB=(BLKSIZE=0,LRECL=80,RECFM=FB),

// SPACE=(CYL,(1,1),RLSE),

// UNIT=SYSDA

/\*

***9. What type of COBOL statement might result in a program abend - data exception or SOC7?***

The MOVE statement, when the receiving field is COMP-3

***10. What is a return code (VSAM) or a RESPONSE?***

VSAM sets the return codes in register 15, the return codes indicate if the request worked or not.

***11. Describe what the SEARCH ALL verb does in COBOL.***

The search all it is used to find an element on a table, it is similar to a binary search and the table elements should be sorted.

***12. What does the COBOL / DB2 fetch command do?***

The FETCH statement positions a cursor on a row of its result table. It can return zero, one, or multiple rows and assigns the values of the rows to variables if there is a target specification.

***13. How does a COBOL program know when it has come to the end of a DB2 table?***

Through the SQL Return Codes

***14. What are the advantages and disadvantages of using a relational database (DB2) with COBOL programs?***

The db2 provides database integrity, consistency, and backup and recovery of the data, but requires proper design and administration of the databases, and development of the applications