MAINTENANCE PROJECT

Given a system consisting of Transactions and modules (which are related to the Transactions).
Length of the Transaction name or module name :1-3 characters

Given that a module is defective (root cause) determine the paths back to a given transaction.

In so doing also print out:-

a) the transactions in the system under study;

b) the unique modules within the system; and

c) an explosion of the transaction under review

This is an example given :

Relationships example used where there are 2 transactions A and Q (Data set end with **). ;

There is a space between the module to module or transaction to module relationship (eg C F; D X; etc)

The example data set (inp.txt) contains the following :

(F after the * * is the name of the defective module and Q is the Transaction for the explosion)

C F; D X; D Y;A B; A C; Q C; Q D ;A D; B X; B Y; B Z; D Z; X P; Y X; Z B1; Z F; **;F;Q;

1. Show a User Interface for the project.

2.Given that there is a defective module (eg F),

a)Print out the number of unique modules in the system

Using the example above the unique modules are B,C,D,B1, X,Y,Z,F,P ;

There are 9 Unique modules and there are 2 transactions A and Q

b) Show the given paths from the transaction to the defective module.

Using the example above for transaction Q it will be :

Q C F

Q D Z F

c) Show the explosion of a given transaction (eg Transaction Q); Note "*" represents a previous call to a module.

Q

C

F

D

X

P

Y

X*

Z

B1

F*