

Hi Sir ,
 User number USER35 .
 PROGRAM-ID. TESTCODE.

Module 3 Review

1. Which of these variable names are correct? What is wrong with the incorrect ones?

```

01 CUSTOMER-REC          PIC 30.
05 COMPANY-NAME          PIC X(40) .
    05 EMPLOYEE AGE      PIC 9(03) .
    05 9RETIRED-INDICATOR PIC X(01) .
05 ADDRESS.
    05 STREET-ADDRESS    PIC X(30) .
    10 CITY              PIC X(30) .
    10 STATE             PIC X(02) .
    10 MOVE              PIC 9(11) .
    10 ZIP_CODE          PIC X(05) .
  
```

```

DATA DIVISION.
WORKING-STORAGE SECTION.
01 EMP-RECORD.
    05 EMP-NAME.
        10 EMP-FNAME      PIC X(15).
        10 EMP-LNAME      PIC X(15).
    05 EMP-HOURLY-RATE    PIC 9(3)V99.
    05 EMP-OT-RATE       PIC V99.
    05 EMP-HOURS         PIC 9(3).
    05 EMP-PAY           PIC 9(7)V99.
  
```

2. Is this record layout syntactically correct →

3. If it's correct which of these statements that reference the fields are "legal"?

- MOVE 10 TO EMP-NAME.
- MOVE 'SMITHFIELD HOMES' TO EMP-FNAME.
- MOVE EMP-FNAME TO EMP-OT-RATE.
- MOVE EMP-OT-RATE TO EMP-PAY.
- MOVE '10' TO EMP-HOURS.

98

Answer :

The whole record need to be restructured.

* group item "CUSTOMER-REC" contained the "PICTURE" clause. (error / Group Item must not having a picture clause (also end by dot)

```

01 CUSTOMER-REC.                                00001500
    05 COMPANY-NAME          PIC X(40).          00001600
  
```

** adding Underscore (spaces is not accepted in var name) 00001700

```

05 EMPLOYEE_AGE PIC 9(03).                      00001800
05 9RETIRED-INDICATOR PIC X(01).                00001900
  
```

* // ADDRESS is not allowed as elementary item/group item reserved word!! 00002000

```

05 ADDRESS1.                                    00002100
    10 STREET-ADDRESS PIC X(30).                00002200
    10 CITY PIC X(30).                          00002300
    10 STATE PIC X(02).                         00002400
  
```

* // Move is not allowed as var name it is an op/code 00002500

```

10 MOVE1 PIC 9(11).                            00002600
10 ZIP_CODE PIC X(05).                          00002700
  
```

2. Is this record layout syntactically correct →

```
DATA DIVISION.  
WORKING-STORAGE SECTION.  
01 EMP-RECORD.  
   05 EMP-NAME.  
       10 EMP-FNAME      PIC X(15).  
       10 EMP-LNAME      PIC X(15).  
   05 EMP-HOURLY-RATE     PIC 9(3)V99.  
   05 EMP-OT-RATE        PIC V99.  
   05 EMP-HOURS          PIC 9(3).  
   05 EMP-PAY            PIC 9(7)V99.
```

Answer :Yes . As per PROGRAM-ID. TESTCODE

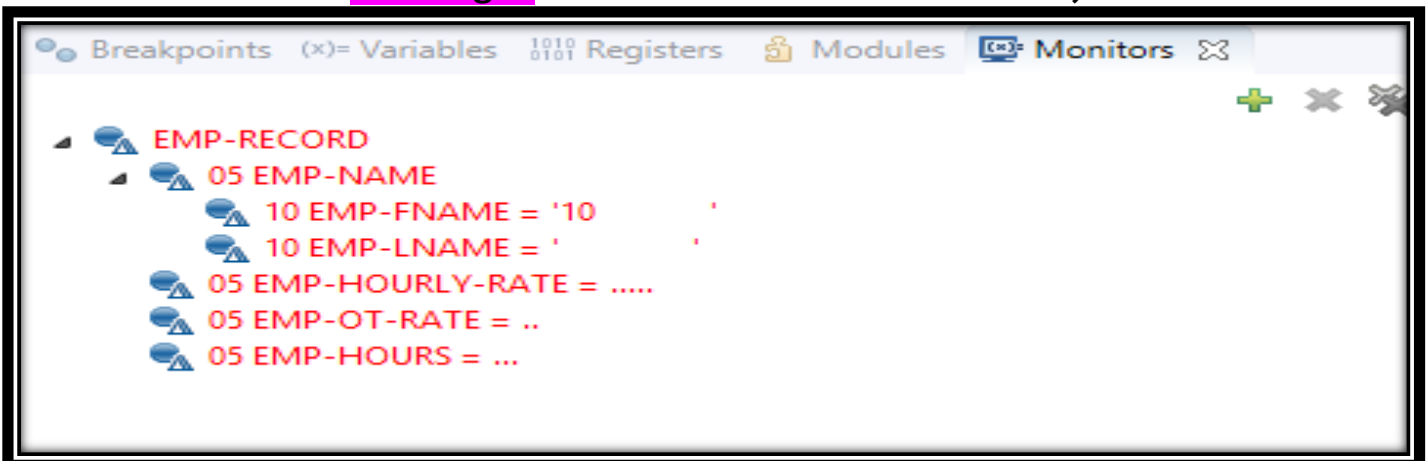
USER35/USER35.LEARN.COBOLE/MODULE3.cbl - IBM Data Studio yes

3. If it's correct which of these statements that reference the fields are "legal"?

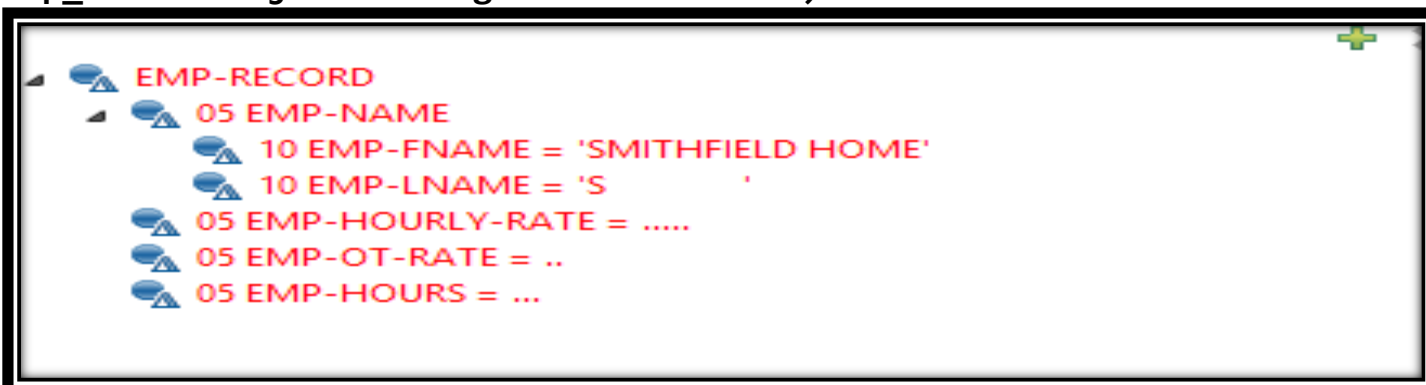
- MOVE 10 TO EMP-NAME.
- MOVE 'SMITHFIELD HOMES' TO EMP-FNAME.
- MOVE EMP-FNAME TO EMP-OT-RATE.
- MOVE EMP-OT-RATE TO EMP-PAY.
- MOVE '10' TO EMP-HOURS.

98

move 10 to EMP-Name . (10 will be left justified to fall in EMP-FName not legal because 10 is not a name)



MOVE 'SMITHFIELD HOMES' TO EMP-Name.
(not legal because the EMP-fname is having the first name and emp_lname is just having the letter "s")



MOVE 'SMITHFIELD HOMES' TO EMP-FNAME.

(not legal because of the truncation due to putting 16 byte in EMP-FNAME which is 15 byte alphanumeric dataitem)

MOVE EMP-FNAME TO EMP-OT-RATE.

(not legal because of moving chars/ alphanumeric to a numeric field / the numeric field is now zeros)

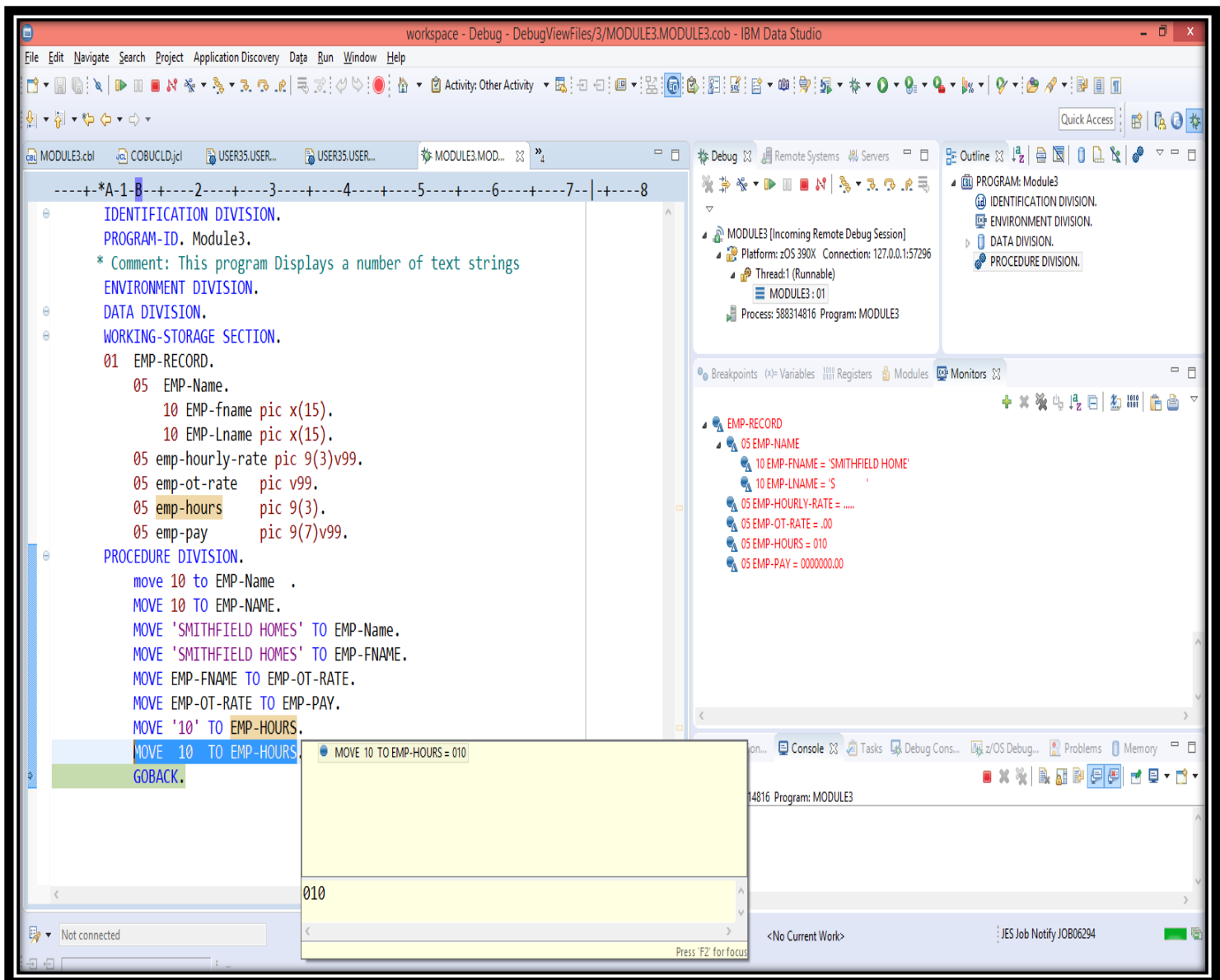
MOVE EMP-OT-RATE TO EMP-PAY.

(Ok will work because of same decimal partition)

MOVE '10' TO EMP-HOURS.

(Caution will work but it is better to write the 10 without quotation)

GOBACK.



Workshop 3.1b - Create new COBOL program

Record layout for FAVS:

*A-1-B-+-----2-----3-----4-----5-----		
01 FAV-REC.		
05 ARTIST-NAME	PIC X(30).	
05 NUMBER-OF-MUSICIANS	PIC 9(02).	
05 MUSICAL-GENRE	PIC X(12).	
05 COST.		
10 CD-COST	PIC 9(3)V99.	
10 SHIPPING-COST	PIC 9(2)V99.	
10 TAX	PIC 9(2)V99.	
05 BAND-IS-STILL-TOGETHER	PIC X(1).	

Musical Group Name: 30 bytes Alpha-Numeric
Number of musicians in the band: 2 digits
Musical genre - 12 bytes:
CD cost - less than \$1,000 - with two bytes to the right of the decimal place
 • Cost = CD + Shipping + Tax
Band is still together - 1 Byte: Valid values are: T/F 1 byte

Specifications for the record layout. The above non-COBOL format is similar to what you might get as part of a "requirements package"

Answer : done as below

-----*A-1-B-----2-----3-----4-----5-----6-----7--|-----8

```
IDENTIFICATION DIVISION.  
PROGRAM-ID. FAVS.  
***** This MODULE Workshop 3.1b - Create new COBOL program  
DATA DIVISION.  
WORKING-STORAGE SECTION.  
01 FAV-REC.  
    05 ARTIST-NAME          PIC X(30).  
    05 NUMBER-OF-MUSICIAN   PIC 9(02).  
    05 MUSICAL-GENRE        PIC X(12).  
    05 COST.  
        10 CD-COST          PIC 9(3)V99.  
        10 SHIPPING-COST    PIC 9(2)V99.  
        10 TAX              PIC 9(2)V99.  
    05 BAND-IS-STILL-TOGETHER PIC X(1).  
    05 TOTAL-COST           PIC 9(4)V99.  
PROCEDURE DIVISION.  
    MOVE "Millard"          TO ARTIST-NAME.  
    MOVE "The second"       TO MUSICAL-GENRE.  
    MOVE 19                 TO NUMBER-OF-MUSICIAN.  
    MOVE 200.5              TO CD-COST.  
    MOVE 50.5               TO SHIPPING-COST.  
    MOVE .55                TO TAX.  
    MOVE 'T'                TO BAND-IS-STILL-TOGETHER.  
    COMPUTE TOTAL-COST =  
        (CD-COST + SHIPPING-COST + TAX ).  
    DISPLAY "Name: " ARTIST-NAME.  
    DISPLAY "NUMBER-OF-MUSICIAN : " NUMBER-OF-MUSICIAN.
```

Debug Remote Systems Servers

Outline PROGRAM: FAVS
IDENTIFICATION DIVISION.
DATA DIVISION.
PROCEDURE DIVISION.

FAVS [Incoming Remote Debug Session]
Platform: zOS 390X Connection: 127.0.0.1:55828
Thread:1 (Runnable)
FAVS: 01
Process: 588314816 Program: FAVS

Breakpoints Variables Registers Modules Monitors

FAV-REC
05 ARTIST-NAME = 'Millard'
05 NUMBER-OF-MUSICIAN = 19
05 MUSICAL-GENRE = 'The second '
05 COST
10 CD-COST = 200.50
10 SHIPPING-COST = 50.50
10 TAX = 00.55
05 BAND-IS-STILL-TOGETHER = 'T'
05 TOTAL-COST = 0251.55

Remote Con... Console Tasks Debug Cons... z/OS Debug... Problems Memory

Process: 588314816 Program: FAVS