1ºAULA

Introdução ao TSO

Comandos básicos

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Í n d i c e

.

TSO

TSO são as iniciais de Time Sharing Option.

O TSO disponibiliza aos usuários, através de um terminal, um ambiente com as ferramentas adequadas ao desenvolvimento e gestão de aplicações e sistemas informatizados.

É através do TSO que podemos:

- Parametrizar o terminal para sua utilização;
- Manipular Bibliotecas, Data Sets e membros;
- Visualizar e executar Jobs; etc

Teclas de Função (PFs)

- **PF1** Help - Auxilio

- **PF2** Split - Cria mais sessão (Tela)

- **PF3** Volta ao menu anterior

- **PF4** Volta ao comando anterior

- **PF5** Repete o último comando

- **PF6** Repete última alteração

- **PF7** Volta página

- **PF8** Avança página

- **PF9** Navega entre duas sessões (Telas)

- **PF10** Desloca tela á esquerda

- **PF11** Desloca tela á direita

- **PF12** Retrieve / Cancel

- **ENTER** Passa a informação teclada para o TSO

Outras teclas CLEAR, RESET e INSERT .

.

Vamos então detalhar o acesso o TSO.

Siga sempre o exemplo colocado abaixo do comando.

Digite na linha de comando digite a letra **P** e tecle <ENTER>.

```
                      CUSTOMPAC MASTER APPLICATION MENU
  OPTION ===> P                                          SCROLL ===> CSR


                                                  USERID - ALUNOJ3
                                                  TIME  - 21:47

    IS  ISMF    - Interactive Storage Management Facility
    P   PDF     - ISPF/Program Development Facility
    IP  IPCS    - Interactive Problem Control Facility
    OS  SUPPORT - OS/390 ISPF System Support Options
    OU  USER    - OS/390 ISPF User Options
    SM  SMP/E   - SMP/E Dialogs
    IC  ICSF    - Integrated Cryptographic Service Facility
    SD  SDSF    - System Display and Search Facility
    R   RACF    - Resource Access Control Facility
    HC  HCD     - Hardware Configuration Definition
    BMB BMR BLD - BookManager Build (Create Online Documentation)
    BMR BMR READ - BookManager Read (Read Online Documentation)
    BMI BMR INDX - BookManager Read (Create Bookshelf Index)
    X   EXIT    - Terminate ISPF using list/log defaults



    F1=HELP     F2=SPLIT     F3=END     F4=RETURN   F5=RFIND    F6=RCHANGE
  F7=UP       F8=DOWN      F9=SWAP     F10=LEFT    F11=RIGHT   F12=RETRIEVE
```

Começaremos pela opção Utilities em seguida veremos as demais.

Digite em na linha de comando o número **3** e tecle <ENTER>.

```
   Menu  Utilities  Compilers  Options  Status  Help
  -----------------------------------------------------------------------------
                       ISPF Primary Option Menu

  0  Settings     Terminal and user parameters       User ID . : ALUNOJ3
  1  View         Display source data or listings     Time. . . : 21:50
  2  Edit         Create or change source data        Terminal. : 3278
  3  Utilities    Perform utility functions           Screen. . : 1
  4  Foreground   Interactive language processing     Language. : ENGLISH
  5  Batch        Submit job for language processing  Appl ID . : PDF
  6  Command      Enter TSO or Workstation commands   TSO logon : IKJACCNT
  7  Dialog Test  Perform dialog testing              TSO prefix: ALUNOJ3
  8  LM Facility  Library administrator functions     System ID : PRE7
  9  IBM Products IBM program development products     MVS acct. : ASL
  10 SCLM         SW Configuration Library Manager    Release . : ISPF 4.5
  11 Workplace    ISPF Object/Action Workplace


        Enter X to Terminate using log/list defaults




  Option ===> 3

  F1=Help     F3=Exit     F10=Actions  F12=Cancel
```

.

Digite na linha de comando o número **4** e tecle <ENTER>, Os comandos podem ser digitados agrupadamente, neste caso poderíamos na primeira Tela ter digitado **P.3.4** e teclado <ENTER>.

```
   Menu  Help
 --------------------------------------------------------------------------
                         Utility Selection Panel
                                                                         1
Library    Compress or print data set.  Print index listing.  Print,
rename, delete, browse, edit or view members                  2  Data Set   Allocate,
rename, delete, catalog, uncatalog, or display                       information of
an entire data set                             3  Move/Copy  Move, copy, or promote
members or data sets                  4  Dslist     Print or display (to process)
list of data set names.
                    Print or display VTOC information
5  Reset        Reset statistics for members of ISPF library
6  Hardcopy     Initiate hardcopy output                                 7
   Download     Download ISPF C/S, VA for ISPF, transfer map, or data set.
8  Outlist      Display, delete, or print held job output
9  Commands     Create/change an application command table               *
   Reserved     This option reserved for future expansion.
11 Format       Format definition for formatted data Edit/Browse
12 SuperC       Compare data sets                                 (Standard Dialog)
13 SuperCE      Compare data sets Extended                        (Extended Dialog)
14 Search-For   Search data sets for strings of data              (Standard Dialog)
15 Search-ForE  Search data sets for strings of data Extended (Extended Dialog)   Option
   ===> 4
F1=Help      F3=Exit     F10=Actions  F12=Cancel
```

A Biloteca ou Particionado é um repositório onde armazenamos nossos Programas, JOB´s e outros arquivos, utilizaremos a biblioteca da escola **FUTURE.FONTES.COBOL**, como exemplo, então digite em frente ao **Dsname level... FUTURE.FONTES.COBOL**,e tecle <ENTER>.

```
   Menu  RefList  RefMode  Utilities  Help
 --------------------------------------------------------------------------
                      Data          Set          List          Utility
blank Display data set list         P Print data set list              V
Display VTOC information         PV Print VTOC information

                                   Enter one or both of the parameters below:
   Dsname Level . . . FUTURE.FONTES.COBOL
Volume serial  . .

 Data set list options
    Initial View . . . 1  1. Volume          Enter "/" to select option
                          2. Space           /  Confirm Data Set Delete
3. Attrib           /  Confirm Member Delete
4. Total
When the data set list is displayed, enter either:
"/" on the data set list command field for the command prompt pop-up,
an ISPF line command, the name of a TSO command, CLIST, or REXX exec, or
"=" to execute the previous command.

 Option ===>
F1=Help      F3=Exit     F10=Actions  F12=Cancel
```

O TSO trará uma lista das bibliotecas, neste caso apenas uma foi selecionada, para visualizaremos o conteúdo da biblioteca digite no lado esquerdo da biblioteca a letra **E** e tecle <ENTER>, a letra E corresponde à Edit.

```
  Menu  Options  View  Utilities  Compilers  Help
 ------------------------------------------------------------------------------
 DSLIST - Data Sets Matching FUTURE.FONTES.COBOL                    Row 1 of 1

 Command - Enter "/" to select action                 Message           Volume
 ------------------------------------------------------------------------------
 E        FUTURE.FONTES.COBOL                                           PR39C7
 ****************************** End of Data Set list ***************************
```

```
 Command ===>                                          Scroll ===> PAGE
  F1=Help    F3=Exit    F5=Rfind  F12=Cancel
```

Agora o TSO trouxe uma lista dos membros da biblioteca solicitada, os membros poderão ser Editados através do comando <E> ou somente visualizados através dos comandos <V> ou <B> .

```
  Menu  Functions  Confirm  Utilities  Help
 ------------------------------------------------------------------------------
 EDIT          FUTURE.FONTES.COBOL                      Row 00001 of 00032
          Name     Prompt     VV MM    Changed      Size   Init   Mod   ID
 _____ ALOCAARQ           01.05 08/10/04 14:17   116   207      0 IBMUSER
 _____ EXER0001           01.04 08/08/06 18:08   281   198      0 IBMUSER
 _____ EXER0002           01.05 08/08/06 18:18   286   198      0 IBMUSER
 _____ EXER0003           01.00 08/08/06 18:45   278   278      0 IBMUSER
 _____ EXER0004           01.00 08/08/06 18:48   278   278      0 IBMUSER
 _____ EXER0005
 _____ EXER0006           01.00 02/05/08 06:18   374   374      0 IBMUSER
 _____ EXER0007
 _____ EXER0008           01.03 09/12/05 10:51   370   381      0 IBMUSER
 _____ EXER0009           01.00 08/06/04 20:35   393   393      0 IBMUSER
 _____ EXER0010
 _____ EXER0011           01.00 09/08/26 19:41   514   514      0 IBMUSER
 _____ EXER0012           01.01 08/08/06 17:55   571   571      0 IBMUSER
 _____ EXER0013           01.00 08/09/20 15:35   434   434      0 IBMUSER
 _____ EXER0014           01.00 09/08/12 21:03   446   446      0 IBMUSER
 _____ EXER0015           01.03 09/07/27 19:34   710   708      0 IBMUSER
 _____ EXER0016
 _____ EXER0017           01.02 09/08/26 21:14   478   485      0 IBMUSER
 Command ===>                                          Scroll ===> PAGE
  F1=Help       F3=Exit     F10=Actions  F12=Cancel
```

Vamos iniciar pelo comando de edição <E> que tem a função de Editar e permitir a alteração de um membro, para isso digitaremos a letra E do lado esquerdo do Membro EXER0001 a ser editado e teclar <ENTER>. **Exemplos** _E_____ ou ____E____ ou _____E__, qualquer lugar sobre a linha tracejada o comando será válido.

```
  Menu  Functions  Confirm  Utilities  Help
 ------------------------------------------------------------------------------
 EDIT             FUTURE.FONTES.COBOL                      Row 00001 of 00032
          Name     Prompt      VV MM    Changed      Size  Init  Mod  ID
          ALOCAARQ             01.05 08/10/04 14:17   116   207    0 IBMUSER
    E     EXER0001             01.04 08/08/06 18:08   281   198    0 IBMUSER
          EXER0002             01.05 08/08/06 18:18   286   198    0 IBMUSER
          EXER0003             01.00 08/08/06 18:45   278   278    0 IBMUSER
          EXER0004             01.00 08/08/06 18:48   278   278    0 IBMUSER
          EXER0005
          EXER0006             01.00 02/05/08 06:18   374   374    0 IBMUSER
          EXER0007
          EXER0008             01.03 09/12/05 10:51   370   381    0 IBMUSER
          EXER0009             01.00 08/06/04 20:35   393   393    0 IBMUSER
          EXER0010
          EXER0011             01.00 09/08/26 19:41   514   514    0 IBMUSER
          EXER0012             01.01 08/08/06 17:55   571   571    0 IBMUSER
          EXER0013             01.00 08/09/20 15:35   434   434    0 IBMUSER
          EXER0014             01.00 09/08/12 21:03   446   446    0 IBMUSER
          EXER0015             01.03 09/07/27 19:34   710   708    0 IBMUSER
          EXER0016
          EXER0017             01.02 09/08/26 21:14   478   485    0 IBMUSER
 Command ===>                                         Scroll ===> PAGE
  F1=Help     F3=Exit     F10=Actions  F12=Cancel
```

O EXER0001 é um programa em COBOL, nos o utilizaremos para aprender os comandos de edição no TSO.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT      FUTURE.FONTES.COBOL(EXER0001) - 01.04         Columns 00001 00072
 ****** **************************** Top of Data ****************************  000001
 IDENTIFICATION  DIVISION.
 000002       PROGRAM-ID.    EXER0001.
 000003       AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000004       *
 000005       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000006       *                                                              000007
 ENVIRONMENT    DIVISION.
 000008       CONFIGURATION   SECTION.
 000009       SPECIAL-NAMES.
 000010                  DECIMAL-POINT IS COMMA.
 000011       *                                                              000012
 INPUT-OUTPUT   SECTION.
 000013       FILE-CONTROL.
 000014           SELECT CADPECA      ASSIGN  TO  UT-S-CADPECA               000015
 FILE STATUS   IS FS-CADPECA.
 000016       *
 000017           SELECT CADATU       ASSIGN  TO  UT-S-CADATU                000018
 FILE STATUS   IS FS-CADATU.
 Command ===>                                         Scroll ===> CSR
 F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

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Comandos de linha de edição

Comandos básicos.

Deletar linhas, os comandos para deleção de linhas são digitados sempre sobre a numeração de linha (qualquer lugar marcado em vermelho) do programa.

D Indica a deleção da linha corrente;

Para delter-mos uma linha digitar um **D** na sobre o número da linha 000300 e teclar <ENTER>.

```
     File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05         Columns 00001 00072
 ****** **************************** Top of Data ****************************
 000100        IDENTIFICATION  DIVISION.
 000200         PROGRAM-ID.     EXER0001.
 D00300         AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *
 000700        ENVIRONMENT     DIVISION.
 000800         CONFIGURATION    SECTION.
 000900         SPECIAL-NAMES.
 001000                       DECIMAL-POINT IS COMMA.
 001100        *
 001200        INPUT-OUTPUT    SECTION.
 001300         FILE-CONTROL.
 001400             SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA
 001500                     FILE STATUS    IS FS-CADPECA.
 001600        *
 001700             SELECT  CADATU        ASSIGN  TO  UT-S-CADATU
 001800                     FILE STATUS    IS FS-CADATU.
 Command ===>                                          Scroll ===> CSR
 F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Constatamos abaixo que a linha 000300 foi deletada.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05         Columns 00001 00072
 ****** **************************** Top of Data ****************************  000100
 IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.     EXER0001.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                        000700
 ENVIRONMENT    DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 001000                       DECIMAL-POINT IS COMMA.
 001100        *                                                        001200
 INPUT-OUTPUT    SECTION.
 001300         FILE-CONTROL.
 001400             SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA        001500
 FILE STATUS    IS FS-CADPECA.
 001600        *
 001700             SELECT  CADATU        ASSIGN  TO  UT-S-CADATU         001800
 FILE STATUS    IS FS-CADATU.
 Command ===>                                          Scroll ===> CSR
 F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

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Deleção de várias linhas simultaneas:

D5   Indica a deleção da linha corrente e as próximas 4 linhas; Digitar
na linha 000200 **D5** e teclar <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 --------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** **************************** Top of Data **************************** 000100
IDENTIFICATION  DIVISION.
 000200       PROGRAM-ID.    EXER0001.
 D50300       AUTHOR.           FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                         000700
ENVIRONMENT    DIVISION.
 000800       CONFIGURATION   SECTION.
 000900       SPECIAL-NAMES.
 001000                    DECIMAL-POINT IS COMMA.
 001100       *                                                         001200
INPUT-OUTPUT   SECTION.
 001300       FILE-CONTROL.
 001400          SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA          001500
FILE STATUS   IS FS-CADPECA.
 001600       *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU           001800
FILE STATUS   IS FS-CADATU.
 Command ===>                                          Scroll ===> CSR
  F1=Help      F3=Exit      F5=Rfind     F6=Rchange  F12=Cancel
```

Constatamos abaixo que as 5 Linhas marcadas foram deletadas.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 --------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** **************************** Top of Data ****************************
 000100       IDENTIFICATION  DIVISION.
 000200       PROGRAM-ID.     EXER0001.
 000800       CONFIGURATION   SECTION.
 000900       SPECIAL-NAMES.
 001000                    DECIMAL-POINT IS COMMA.
 001100       *                                                         001200
INPUT-OUTPUT   SECTION.
 001300       FILE-CONTROL.
 001400          SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA          001500
FILE STATUS   IS FS-CADPECA.
 001600       *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU           001800
FILE STATUS   IS FS-CADATU.
 001900       *                                                         002000
DATA          DIVISION.
 002100       FILE            SECTION.
 002200       *
 002300       FD  CADPECA
 Command ===>                                          Scroll ===> CSR
  F1=Help      F3=Exit      F5=Rfind     F6=Rchange  F12=Cancel
```

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Deleção de um bloco de linhas:

DD Indica um início e um fim de bloco a ser deletado.
Digitaremos <u>DD</u> na linha 000200 (início) e na linha <u>DD</u> 0001200 (fim) e teclamos <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 --------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** **************************** Top of Data ****************************** 000100
IDENTIFICATION  DIVISION.
 DD0200         PROGRAM-ID.     EXER0001.
 000300         AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400         *
 000500         * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600         *                                                       000700
ENVIRONMENT     DIVISION.
 000800         CONFIGURATION   SECTION.
 000900         SPECIAL-NAMES.
 001000                         DECIMAL-POINT IS COMMA.
 001100         *                                                       DD1200
INPUT-OUTPUT    SECTION.
 001300         FILE-CONTROL.
 001400             SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA        001500
FILE STATUS    IS FS-CADPECA.
 001600         *
 001700             SELECT  CADATU       ASSIGN  TO  UT-S-CADATU         001800
FILE STATUS    IS FS-CADATU.
 Command ===>                                          Scroll ===> CSR
 F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar que o bloco entre 000200 e 001200, marcado com o DD foi excluído.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 --------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** **************************** Top of Data ****************************** 000100
IDENTIFICATION  DIVISION.
 001300         FILE-CONTROL.
 001400             SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA        001500
FILE STATUS    IS FS-CADPECA.
 001600         *
 001700             SELECT  CADATU       ASSIGN  TO  UT-S-CADATU         001800
FILE STATUS    IS FS-CADATU.
 001900         *                                                       002000
DATA           DIVISION.
 002100         FILE            SECTION.
 002200         *
 002300         FD  CADPECA
 002400             RECORD   CONTAINS 80  CHARACTERS
 002500             RECORDING MODE      IS  F
 002600             LABEL    RECORD   IS  STANDARD                       002700
DATA   RECORD     IS  REG-CADPECA.
 002800         01  REG-CADPECA.
 002900             05  COD-PECA              PIC  9(05).
 Command ===>                                          Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

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2.0 Inserção de linhas;
I2 Insere duas linhas a partir da linha corrente.

Digite **I2** na linha 000400 e teclar <ENTER>. Obs. Caso não seja digitado nada na linha que foi inserida o TSO removera a linha quando teclar o próximo <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
 ****** **************************** Top of Data ****************************** 000100
 IDENTIFICATION  DIVISION.
 000200          FILE-CONTROL.
 000300              SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA            I20400
 FILE STATUS   IS FS-CADPECA.
 000500       *
 000600              SELECT  CADATU       ASSIGN  TO  UT-S-CADATU            000700
 FILE STATUS   IS FS-CADATU.
 000800       *                                                             000900
 DATA         DIVISION.
 001000          FILE          SECTION.
 001100       *
 001200       FD  CADPECA
 001300          RECORD    CONTAINS  80  CHARACTERS
 001400          RECORDING MODE     IS  F
 001500          LABEL    RECORD   IS  STANDARD                             001600
 DATA   RECORD    IS  REG-CADPECA.
 001700       01  REG-CADPECA.
 001800          05  COD-PECA            PIC  9(05).
 Command ===>                                          Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Constatamos que linhas em branco foram acrescentadas.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
 ****** **************************** Top of Data ****************************** 000100
 IDENTIFICATION  DIVISION.
 000200          PROGRAM-ID.   EXER0001.
 000300          AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *
 ''''''
 ''''''
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                             000700
 ENVIRONMENT    DIVISION.
 000800       CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 001000                  DECIMAL-POINT IS COMMA.
 001100       *                                                             001200
 INPUT-OUTPUT   SECTION.
 001300          FILE-CONTROL.
 001400              SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA            001500
 FILE STATUS   IS FS-CADPECA.
 001600       *
 Command ===>                                          Scroll ===> CSR
 F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

2.0 Repetição de linhas**;**

R5 Indica que a linha corrente será repetida 5 vezes; Digite
R5 na linha 000400 e teclar <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 -------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05         Columns 00001 00072
 ****** ***************************** Top of Data ***************************** 000100
 IDENTIFICATION  DIVISION.
 000200      PROGRAM-ID.    EXER0001.
 000300      AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 R50400      *
 000500      * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600      *                                                          000700
 ENVIRONMENT    DIVISION.
 000800      CONFIGURATION   SECTION.
 000900      SPECIAL-NAMES.
 001000                DECIMAL-POINT IS COMMA.
 001100      *                                                          001200
 INPUT-OUTPUT   SECTION.
 001300      FILE-CONTROL.
 001400         SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA          001500
 FILE STATUS   IS FS-CADPECA.
 001600      *
 001700         SELECT  CADATU        ASSIGN  TO  UT-S-CADATU           001800
 FILE STATUS   IS FS-CADATU.
 Command ===>                                           Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind    F6=Rchange  F12=Cancel
```

Podemos observar abaixo a repetição da linha 400 repetida 5 vezes.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 -------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05         Columns 00001 00072
 ****** ***************************** Top of Data ***************************** 000100
 IDENTIFICATION  DIVISION.
 000200      PROGRAM-ID.    EXER0001.
 000300      AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400      *
 000410      *
 000420      *
 000430      *
 000440      *
 000450      *
 000500      * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600      *                                                          000700
 ENVIRONMENT    DIVISION.
 000800      CONFIGURATION   SECTION.
 000900      SPECIAL-NAMES.
 001000                DECIMAL-POINT IS COMMA.
 001100      *                                                          001200
 INPUT-OUTPUT   SECTION.
 001300      FILE-CONTROL.
 Command ===>                                           Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind    F6=Rchange  F12=Cancel
```

.

RR Indica a início e fim de um bloco a ser repetido;
Digite **RR** na linha 000100 e **RR** na linha 000400 e teclar <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ----------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
 ****** **************************** Top of Data ****************************  RR0100
 IDENTIFICATION  DIVISION.
 000200         PROGRAM-ID.    EXER0001.
 000300         AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 RR0400         *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                       000700
 ENVIRONMENT    DIVISION.
 000800         CONFIGURATION   SECTION.
 000900         SPECIAL-NAMES.
 001000                         DECIMAL-POINT IS COMMA.
 001100       *                                                       001200
 INPUT-OUTPUT    SECTION.
 001300         FILE-CONTROL.
 001400            SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA       001500
 FILE STATUS    IS FS-CADPECA.
 001600       *
 001700            SELECT  CADATU       ASSIGN  TO  UT-S-CADATU        001800
 FILE STATUS    IS FS-CADATU.
 Command ===>                                          Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar que o bloco com inicio na linha 000100 e termino na linha 000400 foi repetido.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ----------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
 ****** **************************** Top of Data ****************************  000100
 IDENTIFICATION  DIVISION.
 000200         PROGRAM-ID.    EXER0001.
 000300         AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *                                                       000410
 IDENTIFICATION  DIVISION.
 000420         PROGRAM-ID.    EXER0001.
 000430         AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000440       *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                       000700
 ENVIRONMENT    DIVISION.
 000800         CONFIGURATION   SECTION.
 000900         SPECIAL-NAMES.
 001000                         DECIMAL-POINT IS COMMA.
 001100       *                                                       001200
 INPUT-OUTPUT    SECTION.
 001300         FILE-CONTROL.
 001400            SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA
 Command ===>                                          Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

RR2 Indica a iníco e fim de um bloco a ser repetido 2 vezes;
Digite **RR2** na linha 000100 e **RR2** na linha 000400 e teclar <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
 ****** ***************************** Top of Data ***************************** RR2100
 IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.    EXER0001.
 000300        AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 RR2400        *
 000500      * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                            000700
 ENVIRONMENT    DIVISION.
 000800        CONFIGURATION   SECTION.
 000900        SPECIAL-NAMES.
 001000                       DECIMAL-POINT IS COMMA.
 001100        *                                                            001200
 INPUT-OUTPUT   SECTION.
 001300        FILE-CONTROL.
 001400          SELECT  CADPECA       ASSIGN   TO  UT-S-CADPECA            001500
 FILE STATUS    IS FS-CADPECA.
 001600        *
 001700          SELECT  CADATU        ASSIGN   TO  UT-S-CADATU             001800
 FILE STATUS    IS FS-CADATU.
 Command ===>                                          Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar que o bloco com inicio na linha 100 e termino na linha 400 foi repetido 2 vezes.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
 ****** ***************************** Top of Data ***************************** 000100
 IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.    EXER0001.
 000300        AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *                                                            000410
 IDENTIFICATION  DIVISION.
 000420        PROGRAM-ID.    EXER0001.
 000430        AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000440        *                                                            000450
 IDENTIFICATION  DIVISION.
 000460        PROGRAM-ID.    EXER0001.
 000470        AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000480        *
 000500      * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                            000700
 ENVIRONMENT    DIVISION.
 000800        CONFIGURATION   SECTION.
 000900        SPECIAL-NAMES.
 001000                       DECIMAL-POINT IS COMMA.
 Command ===>                                          Scroll ===> CSR
 F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

.

3.0 Cópia de linha**;**

C Indica que a linha corrente será copiada;
Digite **C** na linha 000300 e **A** na linha 000400 e teclar <ENTER>.

> ➤ **A** → De After → A linha será copiada **imediatamente após** a linha onde for digitado a letra A.

> ➤ **B** → De Before → A linha será copiada **imediatamente antes** da linha onde for digitado a letra B.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 -------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** **************************** Top of Data ****************************** 000100
 IDENTIFICATION  DIVISION.
 000200       PROGRAM-ID.    EXER0001.
 C00300       AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 A00400       *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                        000700
 ENVIRONMENT    DIVISION.
 000800       CONFIGURATION    SECTION.
 000900       SPECIAL-NAMES.
 001000                    DECIMAL-POINT IS COMMA.
 001100       *                                                        001200
 INPUT-OUTPUT   SECTION.
 001300       FILE-CONTROL.
 001400          SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA          001500
 FILE STATUS   IS FS-CADPECA.
 001600       *
 001700          SELECT  CADATU       ASSIGN  TO  UT-S-CADATU           001800
 FILE STATUS   IS FS-CADATU.
 Command ===>                                         Scroll ===> CSR
 F1=Help    F3=Exit    F5=Rfind    F6=Rchange  F12=Cancel
```

Podemos observar que o conteúdo da linha 000300 AUTHOR foi copiado para linha 000500.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 -------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** **************************** Top of Data ****************************** 000100
 IDENTIFICATION  DIVISION.
 000200       PROGRAM-ID.    EXER0001.
 000300       AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *                                                        000410
 AUTHOR.      FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                        000700
 ENVIRONMENT    DIVISION.
 000800       CONFIGURATION    SECTION.
 000900       SPECIAL-NAMES.
 001000                    DECIMAL-POINT IS COMMA.
 001100       *                                                        001200
 INPUT-OUTPUT   SECTION.
 001300       FILE-CONTROL.
 001400          SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA          001500
 FILE STATUS   IS FS-CADPECA.
 001600       *
 001700          SELECT  CADATU       ASSIGN  TO  UT-S-CADATU
 Command ===>                                         Scroll ===> CSR
 F1=Help    F3=Exit    F5=Rfind    F6=Rchange  F12=Cancel
```

C3 Indica que a linha corrente será copiada 3 vezes; Digite **C** na linha 000100 e **A** na linha 000400 e teclar <ENTER>.

```
   File   Edit   Confirm   Menu   Utilities   Compilers   Test   Help
 --------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** **************************** Top of Data **************************** C30100
 IDENTIFICATION   DIVISION.
 000200        PROGRAM-ID.     EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 A00400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                            000700
 ENVIRONMENT      DIVISION.
 000800        CONFIGURATION   SECTION.
 000900        SPECIAL-NAMES.
 001000                        DECIMAL-POINT IS COMMA.
 001100        *                                                            001200
 INPUT-OUTPUT     SECTION.
 001300        FILE-CONTROL.
 001400           SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA            001500
 FILE STATUS    IS FS-CADPECA.
 001600        *
 001700           SELECT  CADATU        ASSIGN  TO  UT-S-CADATU             001800
 FILE STATUS    IS FS-CADATU.
 Command ===>                                            Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar que foram copiadas as 3 linhas marcadas anteriormente.

```
   File   Edit   Confirm   Menu   Utilities   Compilers   Test   Help
 --------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** **************************** Top of Data **************************** 000100
 IDENTIFICATION   DIVISION.
 000200        PROGRAM-ID.     EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *                                                            000410
 IDENTIFICATION   DIVISION.
 000420        PROGRAM-ID.     EXER0001.
 000430        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                            000700
 ENVIRONMENT      DIVISION.
 000800        CONFIGURATION   SECTION.
 000900        SPECIAL-NAMES.
 001000                        DECIMAL-POINT IS COMMA.
 001100        *                                                            001200
 INPUT-OUTPUT     SECTION.
 001300        FILE-CONTROL.
 001400           SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA            001500
 FILE STATUS    IS FS-CADPECA.
 Command ===>                                            Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

CC Indica a primeira e a última linha de um bloco que será copiado;

Digite **CC** na linha 00100 , **CC** na linha 000400 e **A** na linha 000900 e teclar <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** ************************** Top of Data ***************************** CC0100
 IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.     EXER0001.
 000300        AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 CC0400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                          000700
 ENVIRONMENT    DIVISION.
 000800        CONFIGURATION   SECTION.
 A00900        SPECIAL-NAMES.
 001000               DECIMAL-POINT IS COMMA.
 001100        *                                                          001200
 INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400          SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA            001500
 FILE STATUS    IS FS-CADPECA.
 001600        *
 001700          SELECT  CADATU       ASSIGN  TO  UT-S-CADATU             001800
 FILE STATUS    IS FS-CADATU.
 Command ===>                                          Scroll ===> CSR
 F1=Help    F3=Exit     F5=Rfind    F6=Rchange  F12=Cancel
```

Podemos observar o bloco marcado com inicio **CC** linha 100 e o **CC** fim linha 400 foi copiado após a linha 900.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** ************************** Top of Data ***************************** 000100
 IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.     EXER0001.
 000300        AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                          000700
 ENVIRONMENT    DIVISION.
 000800        CONFIGURATION   SECTION.
 000900        SPECIAL-NAMES.
 000910        IDENTIFICATION  DIVISION.
 000920        PROGRAM-ID.     EXER0001.
 000930        AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000940        *                                                          001000
 DECIMAL-POINT IS COMMA.
 001100        *                                                          001200
 INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400          SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA
 Command ===>                                          Scroll ===> CSR
 F1=Help    F3=Exit     F5=Rfind    F6=Rchange  F12=Cancel
```

4.0 Movimentação de linha;

M Indica que a linha corrente será movimentado;
Digite **M** na linha 000200 e **A** na linha 000400 e teclar <ENTER

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** ************************** Top of Data ***************************** 000100
 IDENTIFICATION  DIVISION.
 M00200        PROGRAM-ID.     EXER0001.
```

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```
 000300          AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
A00400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                          000700
ENVIRONMENT    DIVISION.
 000800          CONFIGURATION    SECTION.
 000900          SPECIAL-NAMES.
 001000                           DECIMAL-POINT IS COMMA.
 001100        *                                                          001200
INPUT-OUTPUT    SECTION.
 001300          FILE-CONTROL.
 001400          SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA           001500
FILE STATUS    IS FS-CADPECA.
 001600        *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU            001800
FILE STATUS    IS FS-CADATU.
 Command ===>                                              Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar a movimentação do PROGRAM-ID LINHA 410.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
--------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
****** ************************** Top of Data ****************************** 000100
IDENTIFICATION DIVISION.
 000300          AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *                                                          000410
 PROGRAM-ID.    EXER0001.
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                          000700
ENVIRONMENT    DIVISION.
 000800          CONFIGURATION    SECTION.
 000900          SPECIAL-NAMES.
 001000                           DECIMAL-POINT IS COMMA.
 001100        *                                                          001200
INPUT-OUTPUT    SECTION.
 001300          FILE-CONTROL.
 001400          SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA           001500
FILE STATUS    IS FS-CADPECA.
 001600        *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU
 001800                  FILE STATUS     IS FS-CADATU.
 Command ===>                                              Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

M3   Indica que a linha corrente será movimentado 3 vezes; Digite
M3 na linha 000100 e **A** na linha 000800 e teclar <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
--------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
****** ************************** Top of Data ****************************** M30100
IDENTIFICATION DIVISION.
 000200          PROGRAM-ID.    EXER0001.
 000300          AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                          000700
ENVIRONMENT    DIVISION.
A00800          CONFIGURATION    SECTION.
 000900          SPECIAL-NAMES.
```

```
 001000                     DECIMAL-POINT IS COMMA.
 001100        *                                                    001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400           SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA      001500
FILE STATUS    IS FS-CADPECA.
 001600        *
 001700           SELECT  CADATU       ASSIGN  TO  UT-S-CADATU       001800
FILE STATUS    IS FS-CADATU.
 Command ===>                                          Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar que as linhas iniciais foram movimentas após a linha 800.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ----------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05     Columns 00001 00072
 ****** **************************** Top of Data *****************************
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                    000700
ENVIRONMENT     DIVISION.
 000800        CONFIGURATION    SECTION.
 000810        IDENTIFICATION  DIVISION.
 000820        PROGRAM-ID.     EXER0001.
 000830        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000900        SPECIAL-NAMES.
 001000                     DECIMAL-POINT IS COMMA.
 001100        *                                                    001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400           SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA
001500                    FILE STATUS    IS FS-CADPECA.
 001600        *
 001700           SELECT  CADATU       ASSIGN  TO  UT-S-CADATU
001800                    FILE STATUS    IS FS-CADATU.
 Command ===>                                          Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
.
```

MM   Indica a primeira e a última linha de um bloco que será movimentado;
Digite **MM** na linha 000200 , **MM** na linha 000500 **A** na linha 000900 e teclar <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ----------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05     Columns 00001 00072
 ****** **************************** Top of Data *****************************  000100
IDENTIFICATION  DIVISION.
 MM0200        PROGRAM-ID.     EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 MM0500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                    000700
ENVIRONMENT     DIVISION.
 000800        CONFIGURATION    SECTION.
 A00900        SPECIAL-NAMES.
 001000                     DECIMAL-POINT IS COMMA.
 001100        *                                                    001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400           SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA      001500
FILE STATUS    IS FS-CADPECA.
```

```
 001600        *
 001700            SELECT  CADATU         ASSIGN  TO  UT-S-CADATU              001800
FILE STATUS    IS FS-CADATU.
 Command ===>                                            Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar que o bloco com inicio na linha 200 e fim na linha 500 foi movimentado após a linha 900

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ----------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
 ****** ***************************** Top of Data ****************************  000100
IDENTIFICATION  DIVISION.
 000600        *                                                              000700
ENVIRONMENT    DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 000910        PROGRAM-ID.    EXER0001.
 000920        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000930        *
 000940        * GERAR ARQUIVO DE PECAS SELECIONADAS                          001000
DECIMAL-POINT IS COMMA.
 001100        *                                                              001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400            SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA             001500
FILE STATUS    IS FS-CADPECA.
 001600        *
 001700            SELECT  CADATU         ASSIGN  TO  UT-S-CADATU              001800
FILE STATUS    IS FS-CADATU.
 Command ===>                                            Scroll ===> CSR
 F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

.

LC   Indica que a linha corrente será conterá apenas letras minúsculas; Digite
LC na linha 000300 tecle <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ----------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08        Columns 00001 00072
 ****** ***************************** Top of Data ****************************  000100
IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.    EXER0001.
 LC0300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                              000700
ENVIRONMENT    DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 001000                        DECIMAL-POINT IS COMMA.
 001100        *                                                              001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
```

```
 001400          SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA        001500
FILE STATUS   IS FS-CADPECA.
 001600      *
 001700          SELECT  CADATU         ASSIGN  TO  UT-S-CADATU         001800
FILE STATUS   IS FS-CADATU.
 Command ===>                                              Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar que o conteúdo da linha 00300 ficou com a letra minúscula.

```
   File   Edit   Confirm   Menu   Utilities   Compilers   Test   Help
 --------------------------------------------------------------------------
 EDIT        FUTURE.FONTES.COBOL(EXER0001) - 01.08        Columns 00001 00072
 ****** **************************** Top of Data ****************************  000100
 IDENTIFICATION  DIVISION.
 000200          PROGRAM-ID.     EXER0001.
 000300          author.         future school cursos de computacao.
 000400      *
 000500      * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600      *                                                           000700
 ENVIRONMENT    DIVISION.
 000800     CONFIGURATION   SECTION.
 000900      SPECIAL-NAMES.
 001000                    DECIMAL-POINT IS COMMA.
 001100      *
 001200     INPUT-OUTPUT    SECTION.
 001300      FILE-CONTROL.
 001400          SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA
 001500                    FILE STATUS    IS FS-CADPECA.
 001600      *
 001700          SELECT  CADATU         ASSIGN  TO  UT-S-CADATU         001800
 FILE STATUS   IS FS-CADATU.
 Command ===>                                              Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

.

UC   Indica que a linha corrente terá apenas letras maiúsculas; Digite
UC na linha 000300 tecle <ENTER>.

```
   File   Edit   Confirm   Menu   Utilities   Compilers   Test   Help
 --------------------------------------------------------------------------
 EDIT        FUTURE.FONTES.COBOL(EXER0001) - 01.08        Columns 00001 00072
 ****** **************************** Top of Data ****************************  000100
 IDENTIFICATION  DIVISION.
 000200          PROGRAM-ID.     EXER0001.
 UC0300          author.         future school cursos de computacao.
 000400      *
 000500      * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600      *                                                           000700
 ENVIRONMENT    DIVISION.
 000800     CONFIGURATION   SECTION.
 000900      SPECIAL-NAMES.
 001000                    DECIMAL-POINT IS COMMA.                       001100
 *
                    001200     INPUT-OUTPUT    SECTION.
                       001300      FILE-CONTROL.
              001400          SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA
                 001500                    FILE STATUS    IS FS-CADPECA.
                    001600      *
```

```
   001700              SELECT  CADATU        ASSIGN  TO  UT-S-CADATU
           001800                     FILE STATUS    IS FS-CADATU.
    Command ===>                                              Scroll ===> CSR
          F1=Help      F3=Exit      F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar que o conteúdo da linha 00300 ficou com a letra maiúscula.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
   ----------------------------------------------------------------------
   EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08        Columns 00001 00072
   ****** ****************************** Top of Data ****************************** 000100
   IDENTIFICATION  DIVISION.
    000200        PROGRAM-ID.     EXER0001.
    000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
    000400        *
    000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
    000600        *                                                       000700
   ENVIRONMENT     DIVISION.
    000800        CONFIGURATION    SECTION.
    000900         SPECIAL-NAMES.
    001000                        DECIMAL-POINT IS COMMA.
    001100        *
   001200       INPUT-OUTPUT    SECTION.
    001300        FILE-CONTROL.
    001400           SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA
   001500                    FILE STATUS    IS FS-CADPECA.
    001600        *
   001700           SELECT  CADATU        ASSIGN  TO  UT-S-CADATU         001800
   FILE STATUS    IS FS-CADATU.
    Command ===>                                              Scroll ===> CSR
   F1=Help      F3=Exit      F5=Rfind     F6=Rchange  F12=Cancel
```

Comandos de deslocamento.

) ➔ Desloca para a direita de uma ou mais colunas; Digite

) na linha 000300 e tecle <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
   ----------------------------------------------------------------------
   EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
   ****** ****************************** Top of Data ****************************** 000100
   IDENTIFICATION  DIVISION.
    000200        PROGRAM-ID.     EXER0001.
   )00300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
    000400        *
    000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
    000600        *                                                       000700
   ENVIRONMENT     DIVISION.
    000800        CONFIGURATION    SECTION.
    000900         SPECIAL-NAMES.
    001000                        DECIMAL-POINT IS COMMA.
    001100        *                                                       001200
   INPUT-OUTPUT    SECTION.
    001300        FILE-CONTROL.
```

```
 001400          SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA           001500
FILE STATUS   IS FS-CADPECA.
 001600       *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU            001800
FILE STATUS   IS FS-CADATU.
 Command ===>                                           Scroll ===> CSR
  F1=Help      F3=Exit      F5=Rfind    F6=Rchange  F12=Cancel
```

Podemos observar o deslocamento para a direita da linha 00300;

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 --------------------------------------------------------------------------
 EDIT        FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
 ****** ************************* Top of Data ***************************** 000100
IDENTIFICATION  DIVISION.
 000200         PROGRAM-ID.    EXER0001.
 000300          AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                        000700
ENVIRONMENT    DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 001000                    DECIMAL-POINT IS COMMA.
 001100       *                                                        001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400          SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA           001500
FILE STATUS   IS FS-CADPECA.
 001600       *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU            001800
FILE STATUS   IS FS-CADATU.
 Command ===>                                           Scroll ===> CSR
  F1=Help      F3=Exit      F5=Rfind    F6=Rchange  F12=Cancel
```
.

(➔ Desloca para a esquerda de uma ou mais colunas;

Digite **(** na linha 000300 e tecle <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 --------------------------------------------------------------------------
 EDIT        FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
 ****** ************************* Top of Data ***************************** 000100
IDENTIFICATION  DIVISION.
 000200         PROGRAM-ID.    EXER0001.
 (00300         AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                        000700
ENVIRONMENT    DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 001000                    DECIMAL-POINT IS COMMA.
 001100       *                                                        001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400          SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA           001500
FILE STATUS   IS FS-CADPECA.
```

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```
 001600        *
 001700          SELECT  CADATU       ASSIGN  TO  UT-S-CADATU              001800
FILE STATUS    IS FS-CADATU.
 Command ===>                                            Scroll ===> CSR
F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar o deslocamento para a esquerda da linha 00300;

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 --------------------------------------------------------------------------------
 EDIT      FUTURE.FONTES.COBOL(EXER0001) - 01.05        Columns 00001 00072
 ****** ************************** Top of Data **************************** 000100
IDENTIFICATION  DIVISION.
 000200          PROGRAM-ID.     EXER0001.
 000300          AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                         000700
ENVIRONMENT    DIVISION.
 000800       CONFIGURATION   SECTION.
 000900        SPECIAL-NAMES.
 001000                    DECIMAL-POINT IS COMMA.
 001100        *                                                         001200
INPUT-OUTPUT    SECTION.
 001300       FILE-CONTROL.
 001400          SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA            001500
FILE STATUS    IS FS-CADPECA.
 001600        *
 001700          SELECT  CADATU       ASSIGN  TO  UT-S-CADATU            001800
FILE STATUS    IS FS-CADATU.
 Command ===>                                            Scroll ===> CSR
F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

.

Comandos Diversos.

COLS ➔   Trás uma ou mais requas, com a identificação das colunas.

Digite **COLS** na linha 000100 e tecle <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 --------------------------------------------------------------------------------
 EDIT      FUTURE.FONTES.COBOL(EXER0001) - 01.08          Invalid command
 ****** ************************** Top of Data ****************************
COLS          IDENTIFICATION  DIVISION.
 000200          PROGRAM-ID.     EXER0001.
 000300          AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                         000700
ENVIRONMENT    DIVISION.
 000800       CONFIGURATION   SECTION.
 000900        SPECIAL-NAMES.
```

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```
 001000                         DECIMAL-POINT IS COMMA.
 001100        *                                                  001200
INPUT-OUTPUT     SECTION.
 001300        FILE-CONTROL.
 001400          SELECT   CADPECA      ASSIGN   TO  UT-S-CADPECA    001500
FILE STATUS    IS FS-CADPECA.
 001600        *
 001700          SELECT   CADATU       ASSIGN   TO  UT-S-CADATU     001800
FILE STATUS    IS FS-CADATU.
 Command ===>                                          Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar a requa com as posições delimitadas.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ---------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08      Columns 00001 00072
 ****** *************************** Top of Data ****************************
 =COLS> ----+----1----+----2----+----3----+----4----+----5----+----6----+----7--  000100
 IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.     EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                  000700
 ENVIRONMENT    DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 001000                         DECIMAL-POINT IS COMMA.
 001100        *                                                  001200
 INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400          SELECT   CADPECA      ASSIGN   TO  UT-S-CADPECA    001500
 FILE STATUS    IS FS-CADPECA.
 001600        *
 001700          SELECT   CADATU       ASSIGN   TO  UT-S-CADATU
 Command ===>                                          Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

MAX <PF7/PF8>

Exibir o início M + <PF7> ou o fim M + <PF8> do programa.

Exemplo: M + <PF7>

Digite **M** na linha de COMANDO e tecle <PF8>**.**

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 -----------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05      Columns 00001 00072
 ****** ************************** Top of Data **************************  000100
 IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.     EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                  000700
 ENVIRONMENT    DIVISION.
 000800        CONFIGURATION    SECTION.
```

```
 000900         SPECIAL-NAMES.
 001000                      DECIMAL-POINT IS COMMA.
 001100      *                                                    001200
INPUT-OUTPUT    SECTION.
 001300      FILE-CONTROL.
 001400         SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA      001500
FILE STATUS    IS FS-CADPECA.
 001600      *
 001700         SELECT  CADATU        ASSIGN  TO  UT-S-CADATU       001800
FILE STATUS    IS FS-CADATU.
 Command ===> M                                      Scroll ===> CSR
F1=Help      F3=Exit      F5=Rfind      F6=Rchange  F12=Cancel
```

Podemos observar o deslocamento para o fim do programa;

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05      Columns 00001 00072
 026400        *=============================================================*
026500         900-00-ERRO                  SECTION.
 026600        *=============================================================*
 026700
 026800            DISPLAY '**************** EXER0001 ****************'
 026900            DISPLAY '*                                       *'
 027000            DISPLAY '* ERRO ' FS-OPERACAO ' DO ARQUIVO ' FS-ARQUIVO ' *'
 027100            DISPLAY '*                                       *'
 027200            DISPLAY '* FILE STATUS = ' FS-COD-STATUS
 027300                    '                    *'
 027400            DISPLAY '*                                       *'
 027500            DISPLAY '* PROGRAMA ENCERRADO'
 027600                    '                    *'
 027700            DISPLAY '*                                       *'
 027800            DISPLAY '**************** EXER0001 ****************'       027900
STOP    RUN.
 028000
028100         900-00-FIM.        EXIT.
 ****** ************************** Bottom of Data ***************************
 Command ===>                                       Scroll ===> CSR
F1=Help      F3=Exit      F5=Rfind      F6=Rchange  F12=Cancel
```

Digite **M** na linha COMANDO e tecle < PF7>.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05      Columns 00001 00072
 026400        *=============================================================*
026500         900-00-ERRO                  SECTION.
 026600        *=============================================================*
 026700
 026800            DISPLAY '**************** EXER0001 ****************'
 026900            DISPLAY '*                                       *'
 027000            DISPLAY '* ERRO ' FS-OPERACAO ' DO ARQUIVO ' FS-ARQUIVO ' *'
 027100            DISPLAY '*                                       *'
 027200            DISPLAY '* FILE STATUS = ' FS-COD-STATUS
 027300                    '                    *'
 027400            DISPLAY '*                                       *'
 027500            DISPLAY '* PROGRAMA ENCERRADO'
 027600                    '                    *'
 027700            DISPLAY '*                                       *'
 027800            DISPLAY '**************** EXER0001 ****************'       027900
STOP    RUN.
 028000
028100         900-00-FIM.        EXIT.
```

```
****** ****************************** Bottom of Data ***************************
Command ===> M                                                  Scroll ===> CSR
 F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar o deslocamento para o início fim do programa;

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.05          Columns 00001 00072
 ****** ****************************** Top of Data **************************** 000100
 IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.    EXER0001.
 000300        AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *
 000700        ENVIRONMENT    DIVISION.
 000800         CONFIGURATION   SECTION.
 000900         SPECIAL-NAMES.
 001000                        DECIMAL-POINT IS COMMA.
 001100        *                                                            001200
 INPUT-OUTPUT   SECTION.
 001300        FILE-CONTROL.
 001400          SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA              001500
 FILE STATUS    IS FS-CADPECA.
 001600        *
 001700        SELECT  CADATU      ASSIGN  TO  UT-S-CADATU          001800
 FILE STATUS     IS FS-CADATU.                                 Command ===>
 Scroll ===> CSR
```

.

RESET
Para cancelar um estado de exibição dos dados durante a edição;

Digite **RESET** ou **RES** na linha COMANDO e tecle <ENTER>, para omitir a visualização das linhas de mensagens.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.10          Columns 00001 00072
 ****** ****************************** Top of Data ****************************
 ==MSG> -Warning- The UNDO command is not available until you change
 ==MSG>        your edit profile using the command RECOVERY ON.
 000100         IDENTIFICATION  DIVISION.
 000200         PROGRAM-ID.     EXER0001.
 000300         AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400         *
 000500         * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600         *                                                            000700
 ENVIRONMENT    DIVISION.
 000800         CONFIGURATION   SECTION.
 000900         SPECIAL-NAMES.
```

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```
001000                     DECIMAL-POINT IS COMMA.
001100        *                                                     001200
INPUT-OUTPUT    SECTION.
001300        FILE-CONTROL.
001400           SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA     001500
FILE STATUS    IS FS-CADPECA.
001600        *
Command ===>   RES                                      Scroll ===> PAGE
F1=Help     F3=Exit     F5=Rfind    F6=Rchange  F12=Cancel
```

Podemos observar que foram omitidas as linhas de mensagem;

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
---------------------------------------------------------------------
EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.10      Columns 00001 00072
****** ************************** Top of Data ************************** 000100
IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID      EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                    000700
ENVIRONMENT    DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 001000                     DECIMAL-POINT IS COMMA.
 001100        *                                                    001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400           SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA    001500
FILE STATUS    IS FS-CADPECA.
 001600        *
 001700           SELECT  CADATU         ASSIGN  TO  UT-S-CADATU     001800
FILE STATUS    IS FS-CADATU.
 Command ===>                                      Scroll ===> PAGE
  F1=Help     F3=Exit     F5=Rfind    F6=Rchange  F12=Cancel
```

.

PROFILE
Exibir o PROFILE do usuário corrente, isto é, as indicações de defaults usados para edição, para que estes valores possam ser controlados ou alterados; Digite **PROFILE** na linha COMANDO e tecle <ENTER>.

```
F1=Help     F3=Exit     F5=Rfind    F6=Rchange  F12=Cancel
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ---------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.07      Columns 00001 00072
 ****** ************************** Top of Data ************************** 000100
IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.     EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                    000700
ENVIRONMENT    DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
```

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```
 001000                         DECIMAL-POINT IS COMMA.
 001100        *                                                          001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400           SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA          001500
FILE STATUS    IS FS-CADPECA.
 001600        *
 001700           SELECT  CADATU         ASSIGN  TO  UT-S-CADATU           001800
FILE STATUS    IS FS-CADATU.
 001900        *
Command ===> PROFILE                                       Scroll ===> CSR
```

Visualizaremos as configurações atuais do usuário corrente nas 5 primeiras linhas;

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
-------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.07          Columns 00001 00072
****** **************************** Top of Data ******************************
=PROF> ....RES (FIXED - 80)....RECOVERY OFF WARN....NUMBER ON STD.............
 =PROF> ....CAPS ON....HEX OFF....NULLS OFF....TABS OFF........................
 =PROF> ....AUTOSAVE OFF PROMPT....AUTONUM OFF....AUTOLIST OFF....STATS ON......
 =PROF> ....PROFILE UNLOCK....IMACRO NONE....PACK OFF....NOTE ON...............
 =PROF> ....HILITE COBOL FIND.......................................
 000100       IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.      EXER0001.
 000300        AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                          000700
ENVIRONMENT    DIVISION.
 000800        CONFIGURATION   SECTION.
 000900        SPECIAL-NAMES.
 001000                         DECIMAL-POINT IS COMMA.
 001100        *                                                          001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400           SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA
Command ===>                                               Scroll ===> CSR
```

.

RECOVERY
Para Ativar ou Desativar o modo de recuperação, que tema finalidade de desfazer os comandos executados pelo usuário;

Digite **RECOVERY ON** na linha COMANDO e tecle <ENTER>.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
-------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.07          Columns 00001 00072
****** ************************** Top of Data **************************** 000100
IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.      EXER0001.
 000300        AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                          000700
ENVIRONMENT    DIVISION.
 000800        CONFIGURATION   SECTION.
```

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```
 000900         SPECIAL-NAMES.
 001000                        DECIMAL-POINT IS COMMA.
 001100       *                                                        001200
INPUT-OUTPUT    SECTION.
 001300         FILE-CONTROL.
 001400            SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA       001500
FILE STATUS    IS FS-CADPECA.
 001600       *
 001700            SELECT  CADATU         ASSIGN  TO  UT-S-CADATU        001800
FILE STATUS    IS FS-CADATU.
 001900       *
Command ===> RECOVERY ON                          Scroll ===> CSR
```

UNDO

Cancela o último comando executado, sucessivamente;

Digite na linha 000500 uma frase e tecle <ENTER>, depois digite **UNDO** na linha de COMANDO<ENTER>.

```
Scroll ===> CSR

  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ----------------------------------------------------------------------
 EDIT      FUTURE.FONTES.COBOL(EXER0001) - 01.08       Columns 00001 00072
 000200        PROGRAM-ID.    EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *
 000500       * TSO EDITOR MAINFRAME
 000600       *                                                        000700
ENVIRONMENT    DIVISION.
 000800         CONFIGURATION   SECTION.
 000900         SPECIAL-NAMES.
 001000                        DECIMAL-POINT IS COMMA.
 001100       *                                                        001200
INPUT-OUTPUT    SECTION.
 001300         FILE-CONTROL.
 001400            SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA       001500
FILE STATUS    IS FS-CADPECA.
 001600       *
 001700            SELECT  CADATU         ASSIGN  TO  UT-S-CADATU
 001800                        FILE STATUS    IS FS-CADATU.
 001900       *                                                        002000
DATA        DIVISION.
 002100         FILE            SECTION.
Command ===> UNDO                                   Scroll ===> CSR
```

Podemos observar que foi descartada a digitação feita na linha 000500, repetindo o comando **UNDO** ele irá desfazer o comando anterior a digitação da linha e assim sucessivamente..

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ----------------------------------------------------------------------
 EDIT      FUTURE.FONTES.COBOL(EXER0001) - 01.07       Columns 00001 00072  000200
PROGRAM-ID.    EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                        000700
ENVIRONMENT    DIVISION.
 000800         CONFIGURATION   SECTION.
 000900         SPECIAL-NAMES.
 001000                        DECIMAL-POINT IS COMMA.
 001100       *                                                        001200
INPUT-OUTPUT    SECTION.
 001300         FILE-CONTROL.
```

```
 001400          SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA        001500
FILE STATUS   IS FS-CADPECA.
 001600      *
 001700          SELECT  CADATU       ASSIGN  TO  UT-S-CADATU         001800
FILE STATUS   IS FS-CADATU.
 001900      *
 002000      DATA          DIVISION.
 002100      FILE          SECTION.
Command ===>                                              Scroll ===> CSR
```

CANCEL

Cancelar uma edição sem salvar as alterações efetuadas; Digite

na linha de comando **CANCEL** e tecle <ENTER>.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT      FUTURE.FONTES.COBOL(EXER0001) - 01.07        Columns 00001 00072
 ****** *************************** Top of Data *************************** 000100
IDENTIFICATION  DIVISION.
 000200      PROGRAM-ID.    EXER0001.
 000300      AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400      *
 000500      * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600      *                                                          000700
ENVIRONMENT    DIVISION.
 000800      CONFIGURATION   SECTION.
 000900      SPECIAL-NAMES.
 001000               DECIMAL-POINT IS COMMA.
 001100      *                                                          001200
INPUT-OUTPUT   SECTION.
 001300      FILE-CONTROL.
 001400          SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA        001500
FILE STATUS   IS FS-CADPECA.
 001600      *
 001700          SELECT  CADATU       ASSIGN  TO  UT-S-CADATU
 001800               FILE STATUS   IS FS-CADATU.                     001900
 *
 Command ===> CANCEL                              Scroll ===> CSR
```

Será pedida uma confirmação de cancelamento, pois todas as alterações feitas serão perdidas.

Caso queira cancelar tecle <ENTER>, caso não queira perder aos alterações tecle <F3> .

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 - .-------------------- Confirm Cancel --------------------. ---------------
 E |                                                        | mns 00001 00072
 * |                                                        | ***************
 0 | Data set has been changed                              |
 0 |                                                        |              0
 |                                                        | O.
 0 | Instructions:                                          |
 0 |                                                        |
 0 |    Press ENTER key to confirm cancel request.          |
 0 |    (All changes will be discarded)                     |
```

```
0 |                                                      |
0 |    Enter END or EXIT command to return to            |
0 |    edit or view session.                             |
0 |                                                      |
0 |                                                      |
0 | Command ===>                                         |
0 '------------------------------------------------------' CA                001500
FILE STATUS   IS FS-CADPECA.
 001600      *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU               001800
FILE STATUS   IS FS-CADATU.
 001900      *
 Command ===>                                              Scroll ===> CSR
```

LOCATE

Para localizar digite L 3500 e tecle <ENTER>. O TSO localizará o LINHA 003500.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.07        Columns 00001 00072  000200
PROGRAM-ID.    EXER0001.
 000300       AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                               000700
ENVIRONMENT    DIVISION.
 000800       CONFIGURATION   SECTION.
 000900       SPECIAL-NAMES.
 001000                   DECIMAL-POINT IS COMMA.
 001100       *                                                               001200
INPUT-OUTPUT   SECTION.
 001300       FILE-CONTROL.
 001400          SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA               001500
FILE STATUS   IS FS-CADPECA.
 001600       *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU                001800
FILE STATUS   IS FS-CADATU.
 001900       *
 002000       DATA          DIVISION.
 002100          FILE          SECTION.
 Command ===> 1 3500                                      Scroll ===> CSR
```

Podemos observar que foi localizada linha 003500.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.07        Columns 00001 00072  003500
05  PR-UNITARIO        PIC  9(07)V99.
 003600          05  PERDA            PIC  9(07)V99.
 003700          05  TIPO             PIC  X(01).
 003800          05  FILLER           PIC  X(06).
 003900       *
 004000    FD  CADATU
 004100       RECORD   CONTAINS  80  CHARACTERS
```

```
 004200          RECORDING MODE      IS  F
 004300          LABEL    RECORD    IS  STANDARD                       004400
DATA    RECORD    IS  REG-CADATU.
 004500      01  REG-CADATU.
 004600          05  COD-ATU                PIC  9(05).
 004700          05  NOME-ATU               PIC  X(30).
 004800          05  QTD-ATU                PIC  9(05).
 004900          05  QTD-MIN-ATU            PIC  9(05).
 005000          05  QTD-MAX-ATU            PIC  9(05).
 005100          05  FORN-ATU               PIC  X(05).
 005200          05  PR-UNIT-ATU            PIC  9(07)V99.
 005300          05  PERDA-ATU              PIC  9(07)V99.
 005400          05  TIPO-ATU               PIC  X(01).
Command ===>                                        Scroll ===> CSR
```

SAVE
Para salvar as alterações efetuadas em um arquivo;

Digite na linha de comando **SAVE** e tecle <ENTER>.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------
 EDIT     FUTURE.FONTES.COBOL(EXER0001) - 01.07        No more to UNDO  000200
PROGRAM-ID.    EXER0001.
 000300     AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400     *
 000500     * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600     *                                                           000700
ENVIRONMENT    DIVISION.
 000800     CONFIGURATION   SECTION.
 000900     SPECIAL-NAMES.
 001000              DECIMAL-POINT IS COMMA.
 001100     *                                                           001200
INPUT-OUTPUT    SECTION.
 001300     FILE-CONTROL.
 001400         SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA           001500
FILE STATUS    IS FS-CADPECA.
 001600     *
 001700         SELECT  CADATU       ASSIGN  TO  UT-S-CADATU
 001800              FILE STATUS    IS FS-CADATU.
 001900     *
 002000     DATA          DIVISION.
 002100     FILE          SECTION.
Command ===> SAVE                                  Scroll ===> CSR
```

Podemos observar que foi salvo o EXER0001, através da mensagem na tela.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------
 EDIT     FUTURE.FONTES.COBOL(EXER0001) - 01.07     Member EXER0001 saved  000200
PROGRAM-ID.    EXER0001.
 000300     AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400     *
 000500     * GERAR ARQUIVO DE PECAS SELECIONADAS
```

```
 000600        *                                              000700
ENVIRONMENT     DIVISION.
 000800        CONFIGURATION   SECTION.
 000900        SPECIAL-NAMES.
 001000                     DECIMAL-POINT IS COMMA.
 001100        *                                              001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400            SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA      001500
FILE STATUS    IS FS-CADPECA.
 001600        *
 001700            SELECT  CADATU         ASSIGN  TO  UT-S-CADATU       001800
FILE STATUS    IS FS-CADATU.
 001900        *                                              002000
DATA           DIVISION.
 002100        FILE          SECTION.
Command ===>                                          Scroll ===> CSR
```

FIND (F)

Para procurar um conjunto específico de caracteres no arquivo;

Digite na linha de comando **F** + (a literal a ser procurada) e tecle <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 -----------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.07        Columns 00001 00072
 ****** **************************** Top of Data ****************************
 000100        IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.     EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                              000700
ENVIRONMENT     DIVISION.
 000800        CONFIGURATION   SECTION.
 000900        SPECIAL-NAMES.
 001000                     DECIMAL-POINT IS COMMA.
 001100        *                                              001200
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400            SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA      001500
FILE STATUS    IS FS-CADPECA.
 001600        *                                          001700
 SELECT  CADATU         ASSIGN  TO  UT-S-CADATU               001800
FILE STATUS    IS FS-CADATU.
 001900        *
Command ===> F PIC                                    Scroll ===> CSR
```

Constatamos que o cursor foi posicionado no 1º PIC encontrado no programa, para ir para o próximo PIC tecle <PF5> essa tecla de atalho visualiza todos PIC de 1 em 1.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
-----------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.07         CHARS 'PIC' found  002800
01  REG-CADPECA.
 002900          05  COD-PECA          | PIC  9(05).
 003000          05  NOME-PECA           PIC  X(30).
 003100          05  QTD-PECA            PIC  9(05).
 003200          05  QTD-MINIMA          PIC  9(05).
 003300          05  QTD-MAXIMA          PIC  9(05).
 003400          05  FORNECEDOR          PIC  X(05).
 003500          05  PR-UNITARIO         PIC  9(07)V99.
 003600          05  PERDA               PIC  9(07)V99.
 003700          05  TIPO                PIC  X(01).
 003800          05  FILLER              PIC  X(06).
 003900       *
 004000     FD  CADATU
 004100         RECORD    CONTAINS  80  CHARACTERS
 004200         RECORDING MODE     IS  F
 004300         LABEL    RECORD    IS  STANDARD                        004400
DATA    RECORD    IS  REG-CADATU.
 004500     01  REG-CADATU.
 004600          05  COD-ATU             PIC  9(05).
 004700          05  NOME-ATU            PIC  X(30).
Command ===>                                           Scroll ===> CSR
```

X ALL
Usado para exibir linhas com conteúdo específico.
Digite na linha de comando **X ALL** e tecle <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
-----------------------------------------------------------------------
 EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.07         Columns 00001 00072
****** **************************** Top of Data ***************************** 000100
IDENTIFICATION  DIVISION.
 000200      PROGRAM-ID.     EXER0001.
 000300      AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                       000700
ENVIRONMENT   DIVISION.
 000800     CONFIGURATION   SECTION.
 000900      SPECIAL-NAMES.
 001000                 DECIMAL-POINT IS COMMA.
 001100       *                                                       001200
INPUT-OUTPUT   SECTION.
 001300      FILE-CONTROL.
 001400        SELECT CADPECA      ASSIGN  TO  UT-S-CADPECA            001500
FILE STATUS   IS FS-CADPECA.
 001600       *
 001700        SELECT CADATU       ASSIGN  TO  UT-S-CADATU
Command ===> X ALL                                     Scroll ===> PAGE
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar que foram omitidas todas as linhas do programas, não foram excluídas apenas não estão sendo exibidas .

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
------------------------------------------------------------------------
EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.07         All lines excluded
****** ***************************** Top of Data ****************************
- -- - - - - - - - - - - - - - - - -  281 Line(s) not Displayed
****** ************************** Bottom of Data ****************************




















 Command ===>                                          Scroll ===> PAGE
 F1=Help      F3=Exit      F5=Rfind     F6=Rchange  F12=Cancel
```

O comando **X ALL,** como descrito enibe a exibição de todas as linhas, para visualizar as linhas com a literal desejada utilizamos o comando **FIND LITERAL ALL.** Para exibir as linhas que contenham uma literal exemplo;

Selecionemos então as linhas de contenham a literal CADATU, digite o comando <u>F CADATU ALL </u>e tecle <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
------------------------------------------------------------------------
EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.07         All lines excluded
****** ***************************** Top of Data ****************************
- -- - - - - - - - - - - - - - - - -  281 Line(s) not Displayed
****** ************************** Bottom of Data ****************************
















 Command ===>  F CADATU ALL                              Scroll ===> PAGE
  F1=Help      F3=Exit      F5=Rfind     F6=Rchange  F12=Cancel
```

.

Na tela temos apenas as linhas que contêm a literal CADATU, para visualizar as próximas telas basta teclar <PF8>. Para apresentar todas as linhas novamente digite na linha de commando RES e tecle <Enter>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.07           19 CHARS 'CADATU'
 ****** ************************** Top of Data ****************************
 - - - - - - - - - - - - - - - - - - - 16 Line(s) not Displayed
 001700          SELECT  CADATU          ASSIGN  TO  UT-S-CADATU          001800
 FILE STATUS   IS FS-CADATU.
 - - - - - - - - - - - - - - - - - - - 21 Line(s) not Displayed
 004000       FD  CADATU
 - - - - - - - - - - - - - - - - - - - 3 Line(s) not Displayed  004400
  DATA     RECORD    IS  REG-CADATU.
 004500       01  REG-CADATU.
 - - - - - - - - - - - - - - - - - - - 26 Line(s) not Displayed  007200
  77  FS-CADATU               PIC  X(02) VALUE SPACES.
 - - - - - - - - - - - - - - - - - - - 32 Line(s) not Displayed  010500
  OUTPUT   CADATU.
 - - - - - - - - - - - - - - - - - - - 11 Line(s) not Displayed  011700
  PERFORM    001-03-FS-CADATU.
 - - - - - - - - - - - - - - - - - - - 18 Line(s) not Displayed  013600
  001-03-FS-CADATU            SECTION.
 - - - - - - - - - - - - - - - - - - - 2 Line(s) not Displayed
 Command ===>                                         Scroll ===> PAGE
  F1=Help     F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

CHANGE (CHG) Para procurar e alterar um conjunto específico de caracteres no texto;

Digite na linha de comando **CHG** CADPECA CADALUNO ALL e tecle <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ----------------------------------------------------------------------
 EDIT      FUTURE.FONTES.COBOL(EXER0001) - 01.07        Columns 00001 00072
 ****** ************************** Top of Data ************************** 000100
 IDENTIFICATION  DIVISION.
 000200       PROGRAM-ID.    EXER0001.
 000300       AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400      *
 000500      * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600      *                                                         000700
 ENVIRONMENT    DIVISION.
 000800       CONFIGURATION    SECTION.
 000900       SPECIAL-NAMES.
 001000                  DECIMAL-POINT IS COMMA.
 001100      *                                                         001200
 INPUT-OUTPUT    SECTION.
 001300       FILE-CONTROL.
 001400          SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA         001500
 FILE STATUS    IS FS-CADPECA.
 001600      *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU          001800
 FILE STATUS    IS FS-CADATU.
 Command ===> CHG CADPECA CADALUNO ALL              Scroll ===> CSR  F1=Help
  F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

.

Podemos observar que todas as literais CADPECA foram alteradas para CADALUNO.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 -------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08      CHARS 'CADPECA' changed
 ****** **************************** Top of Data ****************************** 000100
 IDENTIFICATION  DIVISION.
 000200       PROGRAM-ID.     EXER0001.
 000300       AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                          000700
 ENVIRONMENT   DIVISION.
 000800       CONFIGURATION   SECTION.
 000900        SPECIAL-NAMES.
 001000                      DECIMAL-POINT IS COMMA.
 001100       *                                                          001200
 INPUT-OUTPUT   SECTION.
 001300       FILE-CONTROL.
 ==CHG>        SELECT  CADALUNO      ASSIGN  TO  UT-S-CADALUNO
 ==CHG>                    FILE STATUS    IS FS-CADALUNO.
 001600       *
 001700       SELECT  CADATU       ASSIGN  TO  UT-S-CADATU
 001800                    FILE STATUS   IS FS-CADATU.
 Command ===>                                          Scroll ===> CSR
 F1=Help     F3=Exit      F5=Rfind      F6=Rchange  F12=Cancel
```

Agora vamos fazer o comando CHANGE sem a opção all.

Tecle <PF5> essa tecla de atalho visualiza todos cadaluno de 1 em 1 sem alterar.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 -------------------------------------------------------------------------------
 EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.14      Columns 00001 00072
 ****** **************************** Top of Data ****************************** 000001
 IDENTIFICATION  DIVISION.
 000002       PROGRAM-ID.     EXER0001.
 000003       AUTHOR.          FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000004       *
 000005       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000006       *                                                          000007
 ENVIRONMENT   DIVISION.
 000008       CONFIGURATION   SECTION.
 000009        SPECIAL-NAMES.
 000010                      DECIMAL-POINT IS COMMA.
 000011       *                                                          000012
 INPUT-OUTPUT   SECTION.
 000013       FILE-CONTROL.
 000014        SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA      000015
 FILE STATUS   IS FS-CADPECA.
 000016       *
 000017        SELECT  CADATU       ASSIGN  TO  UT-S-CADATU
 000018                    FILE STATUS   IS FS-CADATU.
 000019       *
 Command ===> CHG CADPECA CADALUNO                     Scroll ===> CSR
```

Podemos observar que todas as literais CADPECA não são alteradas para CADALUNO quando teclamos PF5.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 --------------------------------------------------------------------------------
 EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.15       CHARS 'CADPECA' found
 ****** **************************** Top of Data ***************************** 000001
 IDENTIFICATION  DIVISION.
 000002        PROGRAM-ID.    EXER0001.
 000003        AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000004      *
 000005      * GERAR ARQUIVO DE PECAS SELECIONADAS
 000006      *                                                       000007
 ENVIRONMENT    DIVISION.
 000008        CONFIGURATION   SECTION.
 000009        SPECIAL-NAMES.
 000010                    DECIMAL-POINT IS COMMA.
 000011      *                                                       000012
 INPUT-OUTPUT   SECTION.
 000013        FILE-CONTROL.
 000014           SELECT  CADALUNO     ASSIGN  TO  UT-S-CADPECA       000015
 FILE STATUS   IS FS-CADPECA.
 000016      *
 000017           SELECT  CADATU       ASSIGN  TO  UT-S-CADATU
 000018                   FILE STATUS    IS FS-CADATU.
 000019      *
 Command ===>                                          Scroll ===> CSR
```

CHANGE sem a opção all.

Tecle <PF6> essa tecla de atalho visualiza todos cadaluno de 1 em 1 alterando-os.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 --------------------------------------------------------------------------
 EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.14       Columns 00001 00072
 ****** **************************** Top of Data ***************************** 000001
 IDENTIFICATION  DIVISION.
 000002        PROGRAM-ID.    EXER0001.
 000003        AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000004      *
 000005      * GERAR ARQUIVO DE PECAS SELECIONADAS
 000006      *                                                       000007
 ENVIRONMENT    DIVISION.
 000008        CONFIGURATION   SECTION.
 000009        SPECIAL-NAMES.
 000010                    DECIMAL-POINT IS COMMA.
 000011      *                                                       000012
 INPUT-OUTPUT   SECTION.
 000013        FILE-CONTROL.
 000014           SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA       000015
 FILE STATUS   IS FS-CADPECA.
 000016      *
 000017           SELECT  CADATU       ASSIGN  TO  UT-S-CADATU        000018
 FILE STATUS   IS FS-CADATU.
 000019      *
 Command ===> CHG CADPECA CADALUNO                     Scroll ===> CSR
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 Scroll ===> CSR
```

.

Podemos observar que as literais CADPECA são alteradas para CADALUNO quando teclamos PF6,uma a uma.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 -------------------------------------------------------------------------
EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.15     CHARS 'CADPECA' changed
****** ************************* Top of Data *************************** 000001
IDENTIFICATION  DIVISION.
 000002        PROGRAM-ID.    EXER0001.
 000003        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000004        *
 000005        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000006        *
000007        ENVIRONMENT    DIVISION.
 000008         CONFIGURATION   SECTION.
 000009          SPECIAL-NAMES.
 000010                   DECIMAL-POINT IS COMMA.
 000011        *                                                       000012
INPUT-OUTPUT    SECTION.
 000013         FILE-CONTROL.
 000014           SELECT  CADALUNO      ASSIGN  TO  UT-S-CADALUNO|
000015                  FILE STATUS    IS FS-CADPECA.
 000016        *
 000017           SELECT  CADATU        ASSIGN  TO  UT-S-CADATU     000018
FILE STATUS   IS FS-CADATU.
 000019        *
 Command ===>
```

HEX

Usado para ligar ou desligar o modo de exibição das linhas no formato hexadecimal.

Digite na linha de comando **HEX ON** e tecle <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 -------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08        Columns 00001 00072
 ****** ************************* Top of Data *************************** 000100
IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.    EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                                       000700
ENVIRONMENT    DIVISION.
 000800         CONFIGURATION   SECTION.
 000900          SPECIAL-NAMES.
 001000                   DECIMAL-POINT IS COMMA.
 001100        *                                                       001200
INPUT-OUTPUT    SECTION.
 001300         FILE-CONTROL.
 001400           SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA      001500
FILE STATUS   IS FS-CADPECA.
 001600        *
 001700           SELECT  CADATU        ASSIGN  TO  UT-S-CADATU       001800
FILE STATUS   IS FS-CADATU.
 Command ===> HEX ON                                  Scroll ===> CSR
F1=Help      F3=Exit      F5=Rfind     F6=Rchange  F12=Cancel
```

www.osasconamao.com.br/CURSOS

.

Podemos observar o programa em código hexadecimal.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08          Columns 00001 00072
 ****** **************************** Top of Data ****************************


 ------------------------------------------------------------------------------- 000100
 IDENTIFICATION  DIVISION.
      4444444CCCDECCCCCECDD44CCECECDD444444444444444444444444444444444444444444
      00000009455396931396500495929655B00000000000000000000000000000000000000000
 ------------------------------------------------------------------------------- 000200
 PROGRAM-ID.     EXER0001.
      4444444DDDCDCD6CC444444CECDFFFF444444444444444444444444444444444444444444
      00000007967914094B0000057590001B00000000000000000000000000000000000000000
 ------------------------------------------------------------------------------- 000300
 AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
      4444444CEECDD4444444444CEEEDC4ECCDDD4CEDEDE4CC4CDDDEECCCD444444444444444444
      0000000143869B00000000006434950238663034926204503647431316B00000000000000
 -------------------------------------------------------------------------------
 000400       *
      4444445444444444444444444444444444444444444444444444444444444444444444444
      000000C0000000000000000000000000000000000000000000000000000000000000000000
 Command ===>                                              Scroll ===> CSR
```

Digite na linha de comando HEX OFF e tecle <ENTER>.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08          Columns 00001 00072
 ****** **************************** Top of Data ****************************


 ------------------------------------------------------------------------------- 000100
 IDENTIFICATION  DIVISION.
      4444444CCCDECCCCCECDD44CCECECDD444444444444444444444444444444444444444444
      00000009455396931396500495929655B00000000000000000000000000000000000000000
 ------------------------------------------------------------------------------- 000200
 PROGRAM-ID.     EXER0001.
      4444444DDDCDCD6CC444444CECDFFFF444444444444444444444444444444444444444444
      00000007967914094B0000057590001B00000000000000000000000000000000000000000
 ------------------------------------------------------------------------------- 000300
 AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
      4444444CEECDD4444444444CEEEDC4ECCDDD4CEDEDE4CC4CDDDEECCCD444444444444444444
      0000000143869B00000000006434950238663034926204503647431316B00000000000000
 -------------------------------------------------------------------------------
 000400       *
      4444445444444444444444444444444444444444444444444444444444444444444444444
      000000C0000000000000000000000000000000000000000000000000000000000000000000
 Command ===> HEX OFF                                      Scroll ===> CSR
  F1=Help     F3=Exit     F5=Rfind    F6=Rchange  F12=Cancel
```

.

Podemos observar o programa em linguagem COBOL novamente.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08          Columns 00001 00072
 ****** **************************** Top of Data ****************************** 000100
 IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.    EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                            000700
 ENVIRONMENT     DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 001000                     DECIMAL-POINT IS COMMA.
 001100       *                                                            001200
 INPUT-OUTPUT   SECTION.
 001300        FILE-CONTROL.
 001400          SELECT  CADPECA        ASSIGN  TO  UT-S-CADPECA           001500
 FILE STATUS   IS FS-CADPECA.
 001600       *
 001700          SELECT  CADATU         ASSIGN  TO  UT-S-CADATU            001800
 FILE STATUS   IS FS-CADATU.
 Command ===>                                            Scroll ===> CSR
  F1=Help    F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Comandos de numeração
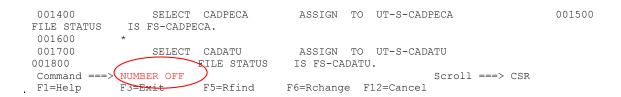
NUMBER

Liga ou desliga a facilidade de numeração de linhas;

Digite na linha de comando **NUMBER** e tecle <ENTER>.

```
   File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08          Invalid parameter
 ****** **************************** Top of Data ****************************** 000100
 IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.    EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400       *
 000500       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600       *                                                            000700
 ENVIRONMENT     DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 001000                     DECIMAL-POINT IS COMMA.
 001100       *                                                            001200
 INPUT-OUTPUT   SECTION.
 001300        FILE-CONTROL.
```

```
 001400          SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA            001500
FILE STATUS    IS FS-CADPECA.
 001600       *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU
 001800                        FILE STATUS     IS FS-CADATU.
 Command ===> NUMBER OFF                                  Scroll ===> CSR
 F1=Help      F3=Exit      F5=Rfind    F6=Rchange  F12=Cancel
```

Podemos observar que a numeração das linhas foram alteradas..

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08        Columns 00001 00072
 ****** *************************** Top of Data *************************** 000001
 IDENTIFICATION  DIVISION.
 000002       PROGRAM-ID.    EXER0001.
 000003       AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000004       *
 000005       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000006       *                                                           000007
 ENVIRONMENT    DIVISION.
 000008       CONFIGURATION    SECTION.
 000009       SPECIAL-NAMES.
 000010                       DECIMAL-POINT IS COMMA.
 000011       *                                                           000012
 INPUT-OUTPUT   SECTION.
 000013       FILE-CONTROL.
 000014          SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA            000015
 FILE STATUS    IS FS-CADPECA.
 000016       *
 000017          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU            000018
 FILE STATUS    IS FS-CADATU.
 Command ===>                                            Scroll ===> CSR
  F1=Help      F3=Exit      F5=Rfind    F6=Rchange  F12=Cancel
```

RENUM
Para ligar a facilidade de numeração de linhas e renumerá-las; Digite

na linha de comando **RENUM** e tecle <ENTER>.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08        Columns 00001 00072
 ****** *************************** Top of Data *************************** 000001
 IDENTIFICATION  DIVISION.
 000002       PROGRAM-ID.    EXER0001.
 000003       AUTHOR.        FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000004       *
 000005       * GERAR ARQUIVO DE PECAS SELECIONADAS
 000006       *                                                           000007
 ENVIRONMENT    DIVISION.
 000008       CONFIGURATION    SECTION.
```

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```
 000009        SPECIAL-NAMES.
 000010                   DECIMAL-POINT IS COMMA.
 000011      *                                              000012
INPUT-OUTPUT   SECTION.
 000013       FILE-CONTROL.
 000014          SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA      000015
FILE STATUS   IS FS-CADPECA.
 000016      *
 000017          SELECT  CADATU       ASSIGN  TO  UT-S-CADATU       000018
FILE STATUS   IS FS-CADATU.
 Command ===> RENUM                              Scroll ===> CSR
  F1=Help      F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Podemos observar que a numeração das linhas foram alteradas.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------------
 EDIT       FUTURE.FONTES.COBOL(EXER0001) - 01.08        Columns 00001 00072
 ****** ************************** Top of Data **************************** 000100
IDENTIFICATION  DIVISION.
 000200       PROGRAM-ID.     EXER0001.
 000300       AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400      *
 000500      * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600      *                                              000700
ENVIRONMENT    DIVISION.
 000800       CONFIGURATION   SECTION.
 000900       SPECIAL-NAMES.
 001000                   DECIMAL-POINT IS COMMA.
 001100      *                                              001200
INPUT-OUTPUT   SECTION.
 001300       FILE-CONTROL.
 001400          SELECT  CADPECA      ASSIGN  TO  UT-S-CADPECA      001500
FILE STATUS   IS FS-CADPECA.
 001600      *
 001700          SELECT  CADATU       ASSIGN  TO  UT-S-CADATU       001800
FILE STATUS   IS FS-CADATU.
 Command ===>                              Scroll ===> CSR
 F1=Help      F3=Exit     F5=Rfind     F6=Rchange  F12=Cancel
```

Overlay
Repetição especial;
OO (duas letras O) indica a primeira e a última linha de um bloco a ser mergeado;

Um exemplo prático, caso você queira comentar varias linhas.
Digite **C** na linha que contém o asterisco na coluna 7 ex: 000400, após digite **OO** na linha 001200
e **OO** na linha 001500 e teclar <ENTER>.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------
 EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.11        Columns 00001 00072
 ****** ************************** Top of Data **************************** 000100
IDENTIFICATION  DIVISION.
```

```
 000200        PROGRAM-ID.     EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 00C400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                              000700
ENVIRONMENT    DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 001000                 DECIMAL-POINT IS COMMA.
 001100        *                                              000O000
INPUT-OUTPUT    SECTION.
 001300        FILE-CONTROL.
 001400          SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA    000O000
FILE STATUS    IS FS-CADPECA.
 001600        *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU     001800
 FILE STATUS    IS FS-CADATU.
 001900        *
Command ===>                                           Scroll ===> CSR
```

Podemos observar que o conteúdo da linha 000400 foi repetido para as linhas do bloco marcado sem alterar o conteúdo inicial do mesmos.

```
  File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
 ----------------------------------------------------------------------
 EDIT       ALUNONA.FONTES.COBOL(EXER0001) - 01.12      Columns 00001 00072
 ****** **************************** Top of Data ***************************
 000100        IDENTIFICATION  DIVISION.
 000200        PROGRAM-ID.     EXER0001.
 000300        AUTHOR.         FUTURE SCHOOL CURSOS DE COMPUTACAO.
 000400        *
 000500        * GERAR ARQUIVO DE PECAS SELECIONADAS
 000600        *                                              000700
ENVIRONMENT    DIVISION.
 000800        CONFIGURATION    SECTION.
 000900        SPECIAL-NAMES.
 001000                 DECIMAL-POINT IS COMMA.
 001100        *                                              001200
*INPUT-OUTPUT    SECTION.
 001300        *FILE-CONTROL.
 001400        *  SELECT  CADPECA       ASSIGN  TO  UT-S-CADPECA    001500
*              FILE STATUS    IS FS-CADPECA.
 001600        *
 001700          SELECT  CADATU        ASSIGN  TO  UT-S-CADATU     001800
FILE STATUS    IS FS-CADATU.
 001900        *
Command ===>                                           Scroll ===> CSR
```

Parabéns você está apto para fazer a 3º aula.

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