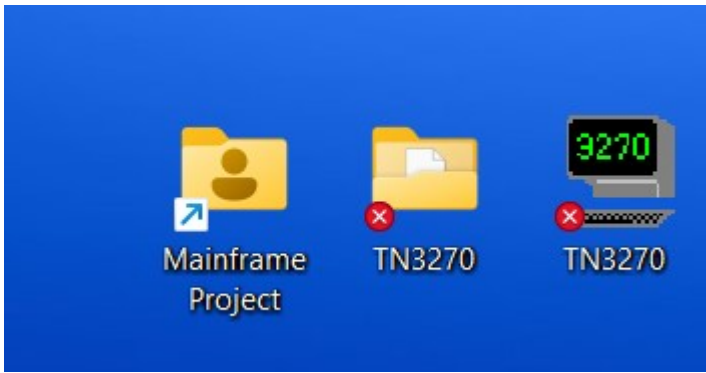# Pós-Graduação MBA
Alta Plataforma Mainframe IBM

Professor: Vagner Bellacosa

- Disciplina: Cobol & Além

COBOL

Modulo 02.03 – Configurações de Ambiente

1) VPN

2) Emulador TN3270 Plus

3) Emulador PCOMM
4) TSO
5) ISPF
6) Barra de Ferramentas ISPF
7) Duvidas

COBOL

1) Vagner Bellacosa seu facilitador

Analista programador desde 1989, onde comecei como auxiliar e tecnólogo em processamento de dados desbravando os primórdios da computação brasileira, um eterno aprendiz em processos Mainframe..

Desde então trabalhei em centenas de projetos, em 4 países e dezenas de instituições financeiras, ora como funcionário, consultor externo e freelancer.

A mais memorável foi o Banco REAL, uma verdadeira escola, onde aprendi muito e tive a oportunidade de participar no aliciante Projeto Y2K, o temível bug do milênio.

Participei em projetos na CESP, Fundação CESP, Transbrasil, ABSA, Real Seguros, BPN, Skandia, DGITA, BES, CGD, BPI, Barclay, Skandia, IBM Italia, Sistemi Informativi, Unicredit, Zurich Assicurazione, Banco Safra e Banco Itaú.

Atualmente trabalho na Spread no Projeto BRB em Brasília, via remoto.
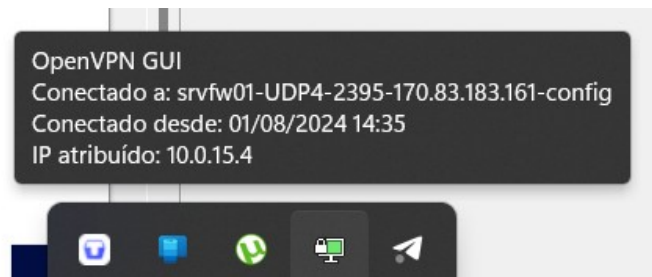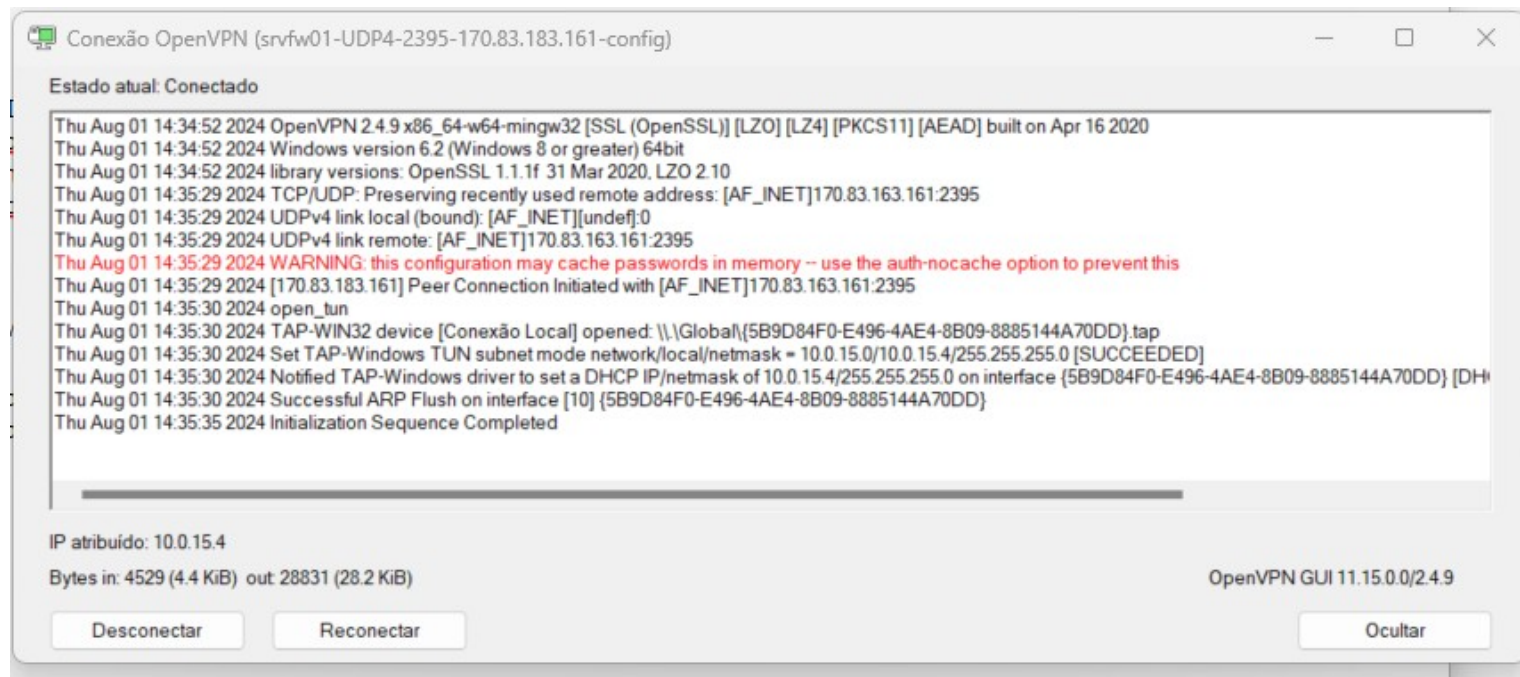
TSO

OpenVPN GUI
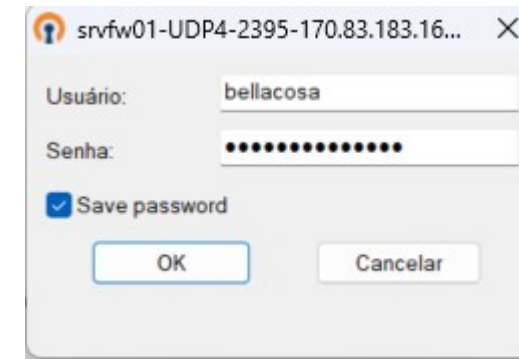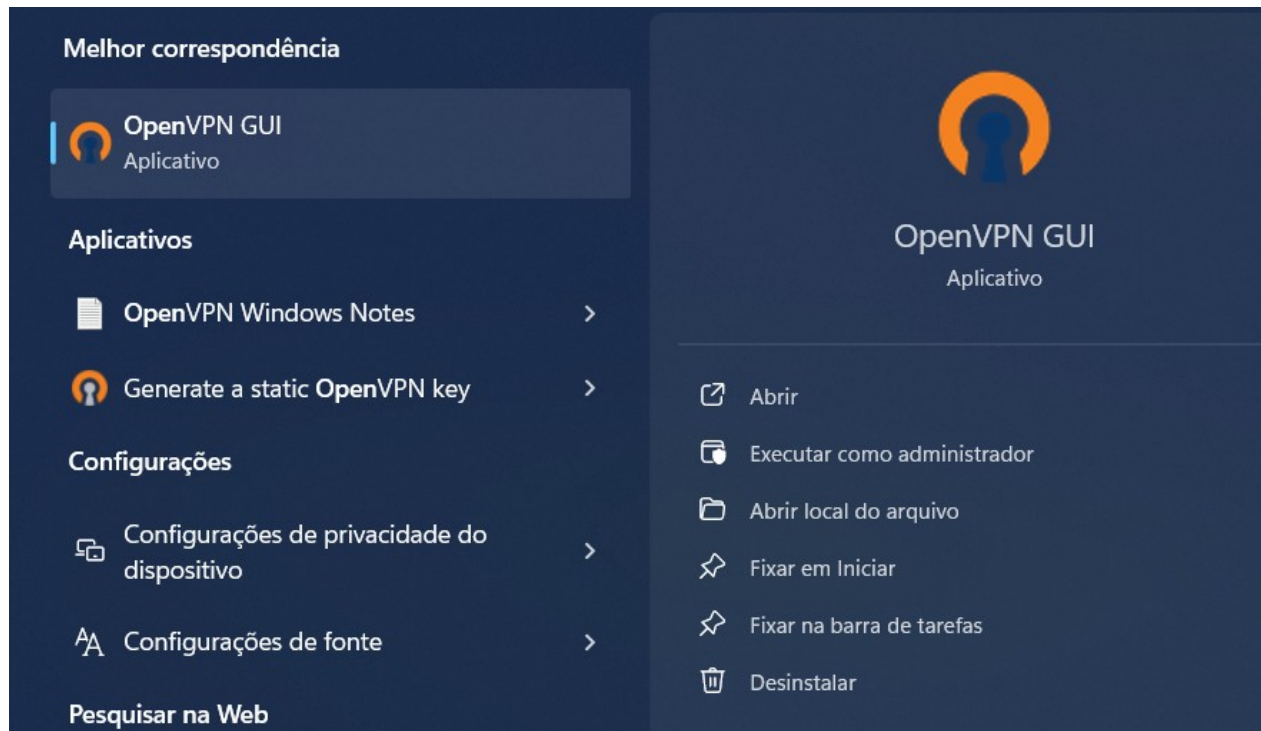
Usuario e Senha serão fornecidos pelo suporte

OpenVPN 2.4.9 x86_64-w64-mingw32
[SSL (OpenSSL)] [LZO] [LZ4] [PKCS11]
[AEAD] built on Apr 16 2020

[AF_INET]170.83.163.161:2395

TSO

OpenVPN GUI - conectado

TSO

Emulador TN3270 Plus

Manual do usuário:
http://www.sdisw.com/tn3270/manual/index.html

Documentos do suporte:
http://www.sdisw.com/tn3270/whitepapers.htm

http://www.sdisw.com/

TSO

Conectando ao Sistema Central (Formação).

IP de acesso:
192.168.15.8

http://www.sdisw.com/

TSO

LOGON USERID

O USER-ID será fornecido via e-mail pelo suporte.

TSO

LOGON USER-ID

Conectando ao Host

TSO

Informe sua Password

TSO

Informe sua senha

Password
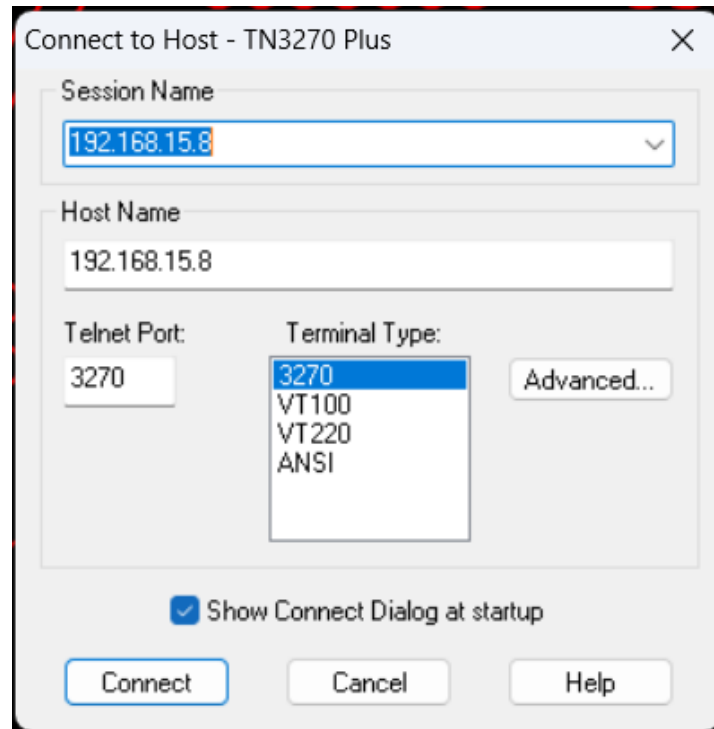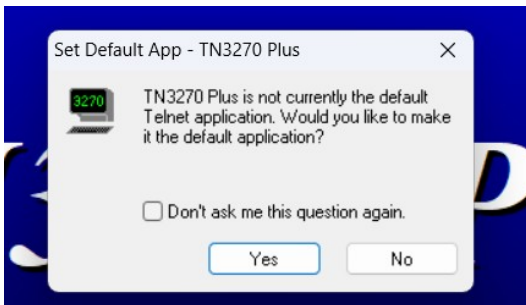
TSO

3: 192.168.15.8 - TN3270 Plus

Host   Edit   View   Setup   Macros   Internet   Help

```
ICH70001I  IBMUSER   LAST ACCESS AT 17:38:50 ON TUESDAY, JULY 30, 2024
IKJ56455I  IBMUSER LOGON  IN PROGRESS AT 17:38:14 ON AUGUST 1, 2024
```

Mr Wizards i´m online...

```
ICH70001I  IBMUSER   LAST ACCESS AT 17:38:50 ON TUESDAY, JULY 30, 2024
IKJ56455I  IBMUSER LOGON  IN PROGRESS AT 17:38:14 ON AUGUST 1, 2024
IKJ56951I  NO BROADCAST MESSAGES
******************************************************************************
*                                                                            *
*   ISPF RESERVADO PARA EQUIPE DE SUPORTE                                     *
*                                                                            *
******************************************************************************

***
```

TSO

```
  Menu   Utilities   Compilers   Options   Status   Help
 ------------------------------------------------------------------------
                    ISPF Primary Option Menu (Suporte técnico)
 Option ===>

 0    Settings      Terminal and user parameters       User ID . : IBMUSER
 1    View          Display source data or listings    Time. . . : 17:39
 2    Edit          Create or change source data       Terminal. : 3278
 3    Utilities     Perform utility functions          Screen. . : 1
 6    Command       Enter TSO or Workstation commands   Language. : ENGLISH
 SD   SDSF          System Display And Search Facility  Appl ID . : ISR
 RC   RACF          Resource Access Control Facility   TSO logon : SUP0PROC
 IP   IPCS          Iteractive Product Control System   TSO prefix:
 DI   DITTO         Data Interfile Transfer,Testing And O  System ID : ADCD
 OM   OMVS          Open Edition For MVS               MVS acct. : ACCT#
 SM   SMP/E         System Management Product          Release . : ISPF 6.1
 IS   ISMF          Integrated Storage Management Facilit
 S2   SDF II        Screen Definition Facility II
 DB   DB2           DB2 user tasks
 AD   DB2 Admin     DB2 administrator tasks
 MQ   WMQS          WMQ Series Operations and Control
 FM   FMOC          File Manager Operations and Control

      Enter X to Terminate using log/list defaults
```

TSO

Teclas de Função


```
F1=HELP      F2=SPLIT      F3=END      F4=RETURN      F5=IFIND      F6=BOOK
F7=UP        F8=DOWN       F9=SWAP lis F10=LEFT       F11=RIGHT     F12=RETRIEVE
  *SDSF
```

```
M A     4,21

 Display  Filter  View  Print  Options  Search  Help                  edu      a    4,21
------------------------------------------------------------------------------
SDSF JOB DATA SET DISPLAY - JOB CATCOB00 (JOB06094)    LINE 1-5 (5)
COMMAND INPUT ===>                                          SCROLL ===> CSR
PREFIX=CAT*  DEST=(ALL)  OWNER=*  SYSNAME=
NP   DDNAME    C SegID DSName                                      Chars
     JESMSGLG 5        KC02746.CATCOB00.JOB06094.D0000002.JESMSGLG  ****,****,**
     JESJCL   5        KC02746.CATCOB00.JOB06094.D0000003.JESJCL    ****,****,**
     JESYSMSG 5        KC02746.CATCOB00.JOB06094.D0000004.JESYSMSG  ****,****,**
     SYSPRINT 5        KC02746.CATCOB00.JOB06094.D0000101.?         ****,****,**
     SYSPRINT 5        KC02746.CATCOB00.JOB06094.D0000102.?         ****,****,**




 F1=HELP      F2=SPLIT      F3=END      F4=RETURN    F5=IFIND      F6=BOOK
 F7=UP        F8=DOWN       F9=SWAP lis F10=LEFT     F11=RIGHT     F12=RETRIEVE
   *SDSF
M A      0.2 05/24/23.144 03:16PM zos.kctr.marist.edu       a    4,21
```

Comando : PFSHOW

Habilita a exibição das teclas de função nas linhas 22 e 23.

ISPF


```
 Menu   Utilities   Compilers   Options   Status   Help
--------------------------------------------------------------------------------
                        ISPF Primary Option Menu
Option ===> _
                                        More:       +
 0   Settings      Terminal and user parameters       User ID . . : KC02746
 1   View          Display source data or listings     Time. . . . : 08:37
 2   Edit          Create or change source data        Terminal. . : 3278A
 3   Utilities     Perform utility functions           Screen. . . : 1
 4   Foreground    Interactive language processing     Language. . : ENGLISH
 5   Batch         Submit job for language processing  Appl ID . . : ISR
 6   Command       Enter TSO or Workstation commands   TSO logon : DBPROCCG
 7   Dialog Test   Perform dialog testing              TSO prefix:
 8   LM Facility   Library administrator functions     System ID : S0W1
 9   IBM Products  IBM program development products     MVS acct. : ACCT#
                                          r           Release . . : ISPF 7.4
 Licensed Materials - Property of IBM
 5650-ZOS      Copyright IBM Corp. 1980, 2019.
 US Government Users Restricted Rights -                -----
 Use, duplication or disclosure restricted
 by GSA ADP Schedule Contract with IBM Corp.           ity


 *DB2@PRI
```

IDE para desenvolvimento de programas Mainframe.

ISPF

Comando Start

Cria novas janelas a

ISPF

Comando Start

Esta limitado a oito janelas, que podem ser renomeadas e permite navegação via mouse ou linha de comando.

ISPF

```
  Menu  Utilities  Compilers  Options  Status  Help
------------------------------------------------------------------
                    ISPF Primary Option Menu
Option ===> SWAP
                                      More:      +
0   Settings     Terminal and user parameters      User ID . : KC02746
1   View         Display source data or listings   Time. . . : 08:41
2   Edit         Create or change source data      Terminal. : 3278A
3   Utilities    Perform utility functions         Screen. . : 4
4   Foreground   Interactive language processing   Language. : ENGLISH
5   Batch        Submit job for language processing Appl ID . : ISR
6   Command      Enter TSO or Workstation commands  TSO logon : DBPROCCG
7   Dialog Test  Perform dialog testing            TSO prefix:
8   LM Facility  Library administrator functions    System ID : S0W1
9   IBM Products IBM program development products   MVS acct. : ACCT#
10  SCLM         SW Configuration Library Manager   Release . : ISPF 7.4
11  Workplace    ISPF Object/Action Workplace

              ------ Other Install Products ------

SD SDSF        System Display and Search Facility
IP IPCS        Inter Problem Control Facility

   DB2@PRIM DB2@PRIM -DB2@PRI *DB2@PRI
MA        0.2 05/24/23.144 09:40AM zos.kctr.marist.edu    a    4,18
```

Comando Swap

Permite Navegar nas janelas abertas, da esquerda para direita num formato carrossel, voltando a

```
Option ===> SWAP

0  Settings      Termin
```

ISPF


```
   Menu  Utilities  Compilers  Options  Status  Help
 --------------------------------------------------------------------------
                          ISPF Primary Option Menu
 Option ===> SWAP
                                  More:        +
 0   Settings      Terminal and user parameters       User ID . : KC02746
 1   View          Display source data or listings    Time. . . : 08:41
 2   Edit          Create or change source data       Terminal. : 3278A
 3   Utilities     Perform utility functions          Screen. . : 4
 4   Foreground    Interactive language processing    Language. : ENGLISH
 5   Batch         Submit job for language processing Appl ID . : ISR
 6   Command       Enter TSO or Workstation commands  TSO logon : DBPROCCG
 7   Dialog Test   Perform dialog testing             TSO prefix:
 8   LM Facility   Library administrator functions    System ID : S0W1
 9   IBM Products  IBM program development products    MVS acct. : ACCT#
 10  SCLM          SW Configuration Library Manager   Release . : ISPF 7.4
 11  Workplace     ISPF Object/Action Workplace

                   ------ Other Install Products ------

 SD SDSF          System Display and Search Facility
 IP IPCS          Inter Problem Control Facility

    DB2@PRIM DB2@PRIM -DB2@PRI *DB2@PRI

 MA               0.2 05/24/23.144 09:40AM zos.kctr.marist.edu    s a    4,18
```

Comando Swap

Permite Navegar nas janelas abertas, da esquerda para direita num formato carrossel, voltando a primeira.

```
Option ===> SWAP
```

ISPF

```
 Menu   Utilities   Compilers   Options   Status   Help
---------------------------------------------------------------------------
                       ISPF Primary Option Menu
Option ===> SWAP LIST_
                                    More:        +
0    Settings       Terminal and user parameters      User ID . : KC02746
1    View           Display source data or listings    Time. . . : 08:41
2    Edit           Create or change source data       Terminal. : 3278A
3    Utilities      Perform utility functions          Screen. . : 4
4    Foreground     Interactive language processing    Language. : ENGLISH
5    Batch          Submit job for language processing Appl ID . : ISR
6    Command        Enter TSO or Workstation commands  TSO logon : DBPROCCG
7    Dialog Test    Perform dialog testing             TSO prefix:
8    LM Facility    Library administrator functions    System ID : SOW1
9    IBM Products   IBM program development products    MVS acct. : ACCT#
10   SCLM           SW Configuration Library Manager   Release . : ISPF 7.4
11   Workplace      ISPF Object/Action Workplace


                   ------ Other Install Products ------


SD SDSF           System Display and Search Facility
IP IPCS           Inter Problem Control Facility


   DB2@PRIM DB2@PRIM -DB2@PRI *DB2@PRI
MA                 0.2 05/24/23.144 09:41AM zos.kctr.marist.edu       a    4,23
```

Comando Swap LIST

Abre uma janela que permite selecionar a janela diretamente.

```
Option ===> SWAP LIST
```

ISPF

Comando Swap LIST

Pode ser selecionado pelo ID ou colocando S na frente

ISPF

Comando Swap LIST

Pode ser selecionado pelo ID ou colocando S na frente.

ISPF

Comando SCRNAME

Utilizado para renomear uma janela

ISPF

Comando SWAPBAR

LIGA/DESLIGA a barra de navegação das janelas

ISPF

Outros comandos de interesse

IBMUSER.WORKBOOK.COBOL(TSOCOMAN)

ISPF

Outros comandos de interesse

```
Command ===>                                                            S
000026    [NUMBER] ON / OFF STD / COBOL
000027     LIGA A NUMERACAO AUTOMATICA NA EDICAO DE ARQUIVOS
000028
000029    [AUTONUM]
000030     RENUMERA AUTOMATICA O ARQUIVO DE EDICAO
000031
000032    [START]
000033     CRIA UMA NOVA JANELA DE EDICAO NA IDE TSO
000034
000035    [SPLIT]
000036     DIVIDE A JANELA EM DUAS VISOES DE ACORDO COM O CURSO
000037
000038  [UP]
000039   SOBE UMA PAGINA / CSR DE TELA
000040
000041  [DOWN]
000042   DESCE UMA PAGINA / CSR DE TELA
000043
000044  [SWAP] START
000045   NAVEGA NA JANELAS ATIVA NA SESSAO
000046
000047  [SWAPLIST]
000048   EXIBE UMA TELA COM TODAS AS JANELAS ATIVAS
000049
000050  [SWAPBAR]
000051   EXIBE NA LINHA 24 ATALHO PARA AS JANELAS ATIVAS
000052
```

IBMUSER.WORKBOOK.COBOL(TSOCOMAN)

ISPF

Outros comandos de interesse


```
Command ===> _____   Scroll ===> CSR
000052
000053 [SCRNAME] NOME
000054  RENOMEIA UMA JANELA, UTIL PARA A NAVEGACAO
000055
000056 [RESET] [RES]
000057  LIMPA A JANELA ATIVA, ELIMINANDO WARNINGS E SUJEIRAS
000058
000059 [SUB]
000060  SUBMETE UM JCL PARA A EXECUCAO
000061
000062 [SAVE]
000063  SALVE UM ARQUIVO EM EDICAO
000064
000065 [SRCHFOR] ATRIBUTO
000066  PESQUISA NA BIBLIOTECA UMA DETERMINADA VARIAVEL
000067
000068 ******************************** FIM DO ARQUIVO ****************************
****** ******************************** Bottom of Data ****************************
```

IBMUSER.WORKBOOK.COBOL(TSOCOMAN)

ISPF

Barra de Ferramentas ISPF

ISPF

Barra de Ferramentas ISPF

ISPF

Barra de Ferramentas ISPF

COBOL

DUVIDAS

Vamos conversar e tirar duvidas...