

МИНОБРНАУКИ РОССИИ
САНКТ-ПЕТЕРБУРГСКИЙ ГОСУДАРСТВЕННЫЙ
ЭЛЕКТРОТЕХНИЧЕСКИЙ УНИВЕРСИТЕТ
«ЛЭТИ» ИМ. В.И. УЛЬЯНОВА (ЛЕНИНА)
Кафедра МОЭВМ

ОТЧЕТ
по лабораторной работе №7
по дисциплине «Программирование на Ассемблере»
Тема: Программа обработки строк.

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Санкт-Петербург

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Цель работы.

Написать программу, читающую строку из PARM и анализирующую наличие заданных параметров. Программа выводит в выходной НД информацию о параметрах в PARM.

Ход работы.

В задание добавлена строка PARM с различными параметрами. Первый случай – позиционные параметры заданы корректно, второй – по умолчанию, третий – второй параметр задан некорректно.

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Vista TN3270 Session B
File Edit Font Transfer Macro Options Window Help
File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT      IBMUSER.SERGEEV.JOBLIB(JOB1) - 01.03      Member JOB1 saved
Command ==> SUB                                     Scroll ==> CSR
***** ***** Top of Data *****
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
000100 //JOB1 JOB
000200 //STEP1 EXEC PROC=ASMACL
000300 //C.SYSIN DD DSN=IBMUSER.SERGEEV.ASM(HELLO),DISP=SHR
000400 //C.SYSPRINT DD DSN=IBMUSER.SERGEEV.LISTLIB(HELLO),
000500 //          DISP=(MOD,KEEP),UNIT=SYSALLDA
000600 //L.SYSIN DD DUMMY
000700 //L.SYSMOD DD DSN=IBMUSER.SERGEEV.LOADLIB(HELLO),
000800 //          DISP=(MOD,KEEP),UNIT=SYSALLDA
000900 //STEP2 EXEC PGM=HELLO,PARM='DBG,CLN,BRWS=Y,VOL=ZAPRD1'
001000 //STEPLIB DD DSN=IBMUSER.SERGEEV.LOADLIB,DISP=SHR
001100 //FOUT DD DSN=IBMUSER.SERGEEV.OUT,DISP=(,KEEP),
001200 //          UNIT=SYSALLDA,SPACE=(TRK,(1,1)),
IKJ56250I JOB JOB1(JOB01622) SUBMITTED
***
-

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Vista TN3270 Session B
File Edit Font Transfer Macro Options Window Help
[Icons]
File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT          IBMUSER.SERGEEV.JOBLIB(JOB1) - 01.04          Member JOB1 saved
Command ==> SUB          Scroll ==> CSR

***** ***** Top of Data *****
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
000100 //JOB1 JOB
000200 //STEP1 EXEC PROC=ASMACL
000300 //C.SYSIN DD DSN=IBMUSER.SERGEEV.ASM(HELLO),DISP=SHR
000400 //C.SYSPRINT DD DSNAME=IBMUSER.SERGEEV.LISTLIB(HELLO),
000500 //          DISP=(MOD,KEEP),UNIT=SYSALLDA
000600 //L.SYSIN DD DUMMY
000700 //L.SYSLMOD DD DSNAME=IBMUSER.SERGEEV.LOADLIB(HELLO),
000800 //          DISP=(MOD,KEEP),UNIT=SYSALLDA
000900 //STEP2 EXEC PGM=HELLO,PARM=' ,BRWS=Y,VOL=ZAPRD1'
001000 //STEPLIB DD DSN=IBMUSER.SERGEEV.LOADLIB,DISP=SHR
001100 //FOUT DD DSN=IBMUSER.SERGEEV.OUT,DISP=(,KEEP),
001200 //          UNIT=SYSALLDA,SPACE=(TRK,(1,1)),
IKJ56250I JOB JOB1(JOB01624) SUBMITTED
***
-
```

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Vista TN3270 Session B
File Edit Font Transfer Macro Options Window Help
[Icons]
File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT          IBMUSER.SERGEEV.JOBLIB(JOB1) - 01.05          Member JOB1 saved
Command ==> SUB          Scroll ==> CSR

***** ***** Top of Data *****
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
000100 //JOB1 JOB
000200 //STEP1 EXEC PROC=ASMACL
000300 //C.SYSIN DD DSN=IBMUSER.SERGEEV.ASM(HELLO),DISP=SHR
000400 //C.SYSPRINT DD DSNAME=IBMUSER.SERGEEV.LISTLIB(HELLO),
000500 //          DISP=(MOD,KEEP),UNIT=SYSALLDA
000600 //L.SYSIN DD DUMMY
000700 //L.SYSLMOD DD DSNAME=IBMUSER.SERGEEV.LOADLIB(HELLO),
000800 //          DISP=(MOD,KEEP),UNIT=SYSALLDA
000900 //STEP2 EXEC PGM=HELLO,PARM='NODBG,NONE,BRWS=Y,VOL=ZAPRD1'
001000 //STEPLIB DD DSN=IBMUSER.SERGEEV.LOADLIB,DISP=SHR
001100 //FOUT DD DSN=IBMUSER.SERGEEV.OUT,DISP=(,KEEP),
001200 //          UNIT=SYSALLDA,SPACE=(TRK,(1,1)),
IKJ56250I JOB JOB1(JOB01625) SUBMITTED
***
-
```

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Рисунки 1 - 3 — Задания для программы

Vista TN3270 Session B

File Edit Font Transfer Macro Options Window Help

File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT IBMUSER.SERGEV.ASM(HELLO) - 01.01 Columns 00001 00072
Command ==> Scroll ==> CSR

***** Top of Data *****

==MSG> -Warning- The UNDO command is not available until you change
==MSG> your edit profile using the command RECOVERY ON.

000001 YREGS
000002 PARMSECT DSECT
000003 LEN DS H
000004 PARMDATA DS CL256
000005 HELLO CSECT
000006 AMODE 31
000007 RMODE 24
000008 STM R14,R12,12(R13)
000009 LR R12,R15
000010 USING HELLO,R12
000011 ST R13,SAVE+4
000012 LA R11,SAVE
000013 ST R11,8(13)
000014 USING PARMSECT,R8
000015 L R8,0(R0,R1)
000016 LH R9,LEN

*LIBUTIL

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Vista TN3270 Session B

File Edit Font Transfer Macro Options Window Help

File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT IBMUSER.SERGEV.ASM(HELLO) - 01.02 Columns 00001 00072
Command ==> Scroll ==> CSR

000017 BCTR R9,R0
000018 EX R9,MOVE
000019 OPEN (FOUT,(OUTPUT))
000020 TM FOUT+48,X'10'
000021 BNO OPENERR
000022 LH R9,LEN
000023 MVI BLANK,C' '
000024 MVC BLANK+1(L'BLANK-1),BLANK
000025 MVC RECOUNT,BLANK
000026 LA R2,PARMDATA
000027 LA R3,RECOUNT
000028 LOOP DS 0H
000029 CLI 0(R2),C','
000030 BE WORD
000031 CLI 0(R2),C'-'
000032 BE ENDLLOOP
000033 MVC 0(1,R3),0(R2)
000034 LA R2,1(R2)
000035 LA R3,1(R3)

*LIBUTIL

MA 0.0 10/13/20.317 11:39PM 127.0.0.1 4,15

Vista TN3270 Session B

File Edit Font Transfer Macro Options Window Help

File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT IBMUSER.SERGEEV.ASM(HELLO) - 01.02 Columns 00001 00072
Command ==> Scroll ==> CSR

```
000036      BCT R9,LOOP
000037      PUT FOUT,REOUT
000038      J END
000039 WORD DS 0H
000040      CLC DBGF,TRUE
000041      BE LSTCHECK
000042      CLC DBG,REOUT
000043      BNE NODBGCHECK
000044      MVC DBGF,TRUE
000045      PUT FOUT,DBGM
000046      J ENDLOOP
000047 NODBGCHECK DS 0H
000048      CLC BLANK,REOUT
000049      BE DEFDBG
000050      CLC NODBG,REOUT
000051      BNE ERROR
000052 DEFDBG DS 0H
000053      MVC DBGF,TRUE
000054      PUT FOUT,NODBGM
*LIBUTIL
```

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Vista TN3270 Session B

File Edit Font Transfer Macro Options Window Help

File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT IBMUSER.SERGEEV.ASM(HELLO) - 01.02 Columns 00001 00072
Command ==> Scroll ==> CSR

```
000055      J ENDLOOP
000056 LSTCHECK DS 0H
000057      CLC LSTF,TRUE
000058      BE NOPOSPAR
000059      CLC CLN,REOUT
000060      BNE NOLSTCHECK
000061      MVC LSTF,TRUE
000062      PUT FOUT,CLNM
000063      J ENDLOOP
000064 NOLSTCHECK DS 0H
000065      CLC BLANK,REOUT
000066      BE DEFLST
000067      CLC NOLST,REOUT
000068      BNE ERROR
000069 DEFLST DS 0H
000070      MVC LSTF,TRUE
000071      PUT FOUT,NOLSTM
000072      J ENDLOOP
000073 NOPOSPAR DS 0H
*LIBUTIL
```

MA 0.0 10/13/20.317 11:39PM 127.0.0.1 A 4,15

Vista TN3270 Session B

File Edit Font Transfer Macro Options Window Help

File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT IBMUSER.SERGEEV.ASM(HELLO) - 01.02 Columns 00001 00072
Command ==> Scroll ==> CSR

```
000074 PUT FOUT,RECOUNT
000075 ENDLOOP DS 0H
000076 MVC RECOUNT,BLANK
000077 LA R3,RECOUNT
000078 LA R2,1(R2)
000079 BCT R9,LOOP
000080 J END
000081 ERROR DS 0H
000082 PUT FOUT,ERRORM
000083 J END
000084 OPENERR DS 0H
000085 WTO 'ERROR OPEN'
000086 END DS 0H
000087 CLOSE FOUT
000088 L R13,SAVE+4
000089 LM R14,R12,12(R13)
000090 LA R15,0
000091 BR R14
000092 SAVE DS 18F
*LIBUTIL
```

M 0.0 10/13/20.317 11:39PM 127.0.0.1 4.15

Vista TN3270 Session B

File Edit Font Transfer Macro Options Window Help

File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT IBMUSER.SERGEEV.ASM(HELLO) - 01.02 Columns 00001 00072
Command ==> Scroll ==> CSR

```
000093 FOUT DCB DSORG=PS,MACRF=PM,DDNAME=FOUT,LRECL=80,RECFM=FBM
000094 RECOUNT DS CL80
000095 BLANK DC CL80' '
000096 DBG DC CL3'DBG'
000097 NODBG DC CL5'NODBG'
000098 DBGM DC CL80'DBG'
000099 NODBGM DC CL80'NODBG'
000100 DBGF DS C'F'
000101 CLN DC CL3'CLN'
000102 NOLST DC CL5'NOLST'
000103 CLNM DC CL80'CLN'
000104 NOLSTM DC CL80'NOLST'
000105 LSTF DS C'F'
000106 TRUE DC C'T'
000107 ERRORM DC CL80'INVALID PARAMETERS'
000108 PARAMOUT DS CL80' '
000109 MOVE MVC PARAMOUT(0),PARMDATA
000110 END HELLO
***** ***** Bottom of Data *****
*LIBUTIL
```

M 0.0 10/13/20.317 11:39PM 127.0.0.1 4.15

Рисунки 4 - 9 — Код программы, обрабатывающей параметры строки PARM

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Vista TN3270 Session B
File Edit Font Transfer Macro Options Window Help
[Icons]
File Edit Edit_Settings Menu Utilities Compilers Test Help

VIEW          IBMUSER.SERGEEV.OUT          Columns 00001 00072
Command ==> _                               Scroll ==> CSR
***** ***** Top of Data *****
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
000001 DBG
000002 CLN
000003 Y
000004 ZAPRD1
***** ***** Bottom of Data *****

*VIEW

MA 0.1 10/13/20.318 12:09AM 127.0.0.1  A 4.15
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```
Vista TN3270 Session B
File Edit Font Transfer Macro Options Window Help
[Icons]
File Edit Edit_Settings Menu Utilities Compilers Test Help

VIEW          IBMUSER.SERGEEV.OUT          Columns 00001 00072
Command ==> _                               Scroll ==> CSR
***** ***** Top of Data *****
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
000001 NODBG
000002 NOLST
000003 Y
000004 ZAPRD1
***** ***** Bottom of Data *****

*VIEW

MA 0.0 10/13/20.318 12:12AM 127.0.0.1  A 4.15
```

```
Vista TN3270 Session B
File Edit Font Transfer Macro Options Window Help
File Edit Edit_Settings Menu Utilities Compilers Test Help

VIEW          IBMUSER.SERGEV.OUT          Columns 00001 00072
Command ==> _____ Scroll ==> CSR
***** ***** Top of Data *****
==MSG> -Warning- The UNDO command is not available until you change
==MSG>                your edit profile using the command RECOVERY ON.
000001 NODBG
000002 INVALID PARAMETERS
***** ***** Bottom of Data *****

*VIEW

M 0.0 10/13/20.318 12:14AM 127.0.0.1  4.15
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Рисунки 10 - 12 — Результаты работы программы для разных исходных данных

Выводы.

В результате выполнения лабораторной работы была написана программа, читающая строку из PARM и анализирующая наличие заданных параметров.