

IBC233 - REVIEW questions

This is a sample application that displays baseball statistics.

The components are:

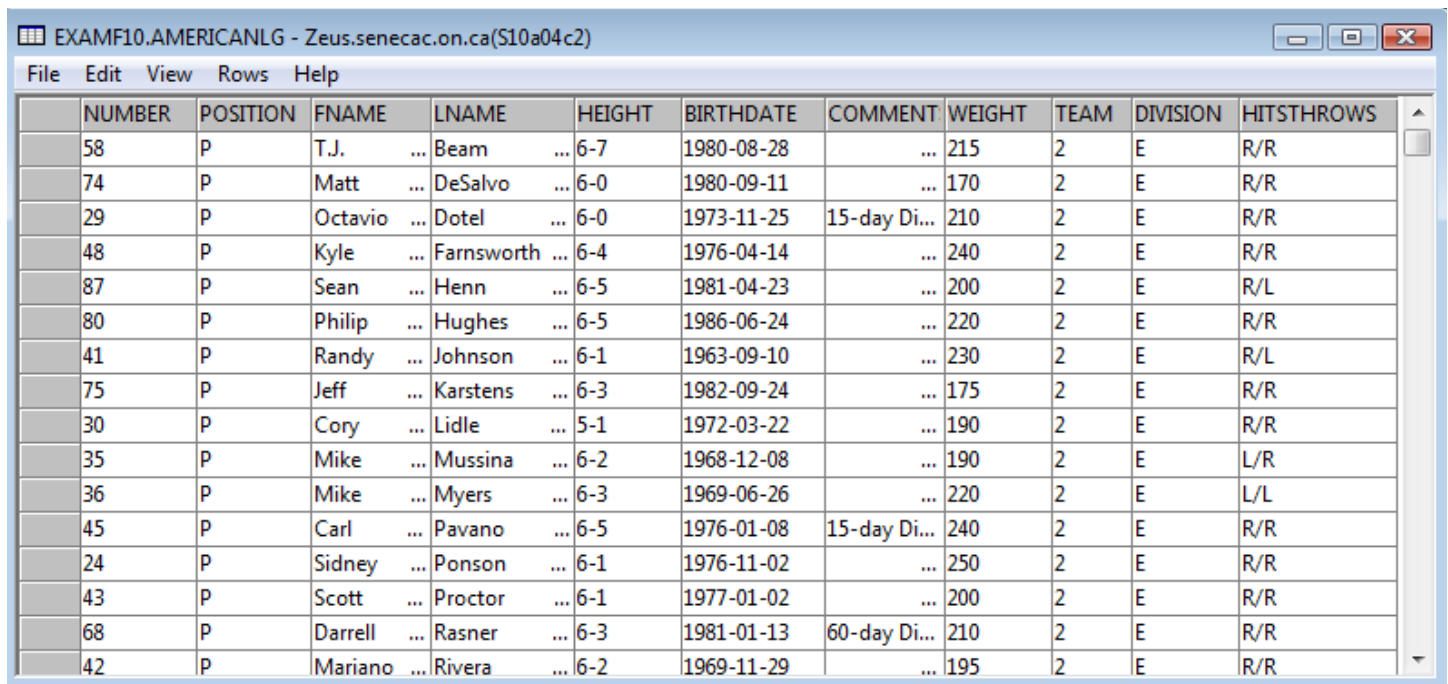
- a display file **BBALLDSP** with 2 record formats (Record 1 and Record 2).
- a group of logical files which select on Player Positions.
- an RPGLE program **PLAYERINFO**, that accepts one parameter.
- a CLLE driver program **DSPLYRSP** that accepts two parameters and passes one of them to the RPG program. The second parameter is used to control overrides.
- a command **DSPLYRS** that runs the CLLE program.

This sample is very similar to the programming tasks on the final exam.

Physical File:

INPUT: BASEBALL12/AMERICANLG

Record format: AMERICANLG



NUMBER	POSITION	FNAME	LNAME	HEIGHT	BIRTHDATE	COMMENT	WEIGHT	TEAM	DIVISION	HITSTHROWS
58	P	T.J.	Beam	6-7	1980-08-28		215	2	E	R/R
74	P	Matt	DeSalvo	6-0	1980-09-11		170	2	E	R/R
29	P	Octavio	Dotel	6-0	1973-11-25	15-day Di...	210	2	E	R/R
48	P	Kyle	Farnsworth	6-4	1976-04-14		240	2	E	R/R
87	P	Sean	Henn	6-5	1981-04-23		200	2	E	R/L
80	P	Philip	Hughes	6-5	1986-06-24		220	2	E	R/R
41	P	Randy	Johnson	6-1	1963-09-10		230	2	E	R/L
75	P	Jeff	Karstens	6-3	1982-09-24		175	2	E	R/R
30	P	Cory	Lidle	5-1	1972-03-22		190	2	E	R/R
35	P	Mike	Mussina	6-2	1968-12-08		190	2	E	L/R
36	P	Mike	Myers	6-3	1969-06-26		220	2	E	L/L
45	P	Carl	Pavano	6-5	1976-01-08	15-day Di...	240	2	E	R/R
24	P	Sidney	Ponson	6-1	1976-11-02		250	2	E	R/R
43	P	Scott	Proctor	6-1	1977-01-02		200	2	E	R/R
68	P	Darrell	Rasner	6-3	1981-01-13	60-day Di...	210	2	E	R/R
42	P	Mariano	Rivera	6-2	1969-11-29		195	2	E	R/R

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Logical Files (used in this application):

ALLPLAYERS.LF

```
.....A.....T.Name+++++.....Functions+++++Comments+
A          R AMERICANLG          PFILE (BASEBALL12/AMERICANLG)
A          K LNAME
A          K FNAME
```

PITCHERS.LF

```
.....A.....T.Name+++++.....Functions+++++Comments+
A          R AMERICANLG          PFILE (BASEBALL12/AMERICANLG)
A          K LNAME
A          K FNAME
A          S POSITION              COMP (EQ 'P')
```

CATCHERS.LF

```
.....A.....T.Name+++++.....Functions+++++Comments+
A          R AMERICANLG          PFILE (BASEBALL12/AMERICANLG)
A          K LNAME
A          K FNAME
A          S POSITION              COMP (EQ 'C')
```

OUTFIELD.LF

```
.....A.....T.Name+++++.....Functions+++++Comments+
A          R AMERICANLG          PFILE (BASEBALL12/AMERICANLG)
A          K LNAME
A          K FNAME
A          S POSITION              COMP (EQ 'O')
```

INFIELD.LF

```
.....A.....T.Name+++++.....Functions+++++Comments+
A          R AMERICANLG          PFILE (BASEBALL12/AMERICANLG)
A          K LNAME
A          K FNAME
A          S POSITION              COMP (EQ 'I')
```

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As an alternate example (not used in this application) code the DDS for a logical file that would show only Bluejay pitchers called BLUEJAYP

Produce the following logical file, BLUEJAYP using the appropriate method of either DDS code or SQL.

It is based on the AMERICANLG file in a library called BASEBALL12. The file data and field names show on page 1.

The logical file should select all Toronto Blue Jay Pitchers in last name order. The Blue Jay Team Number is 3 and the position code for a Pitcher is 'P'.

If your choice is to use SQL – write the SQL code below the coding form:

T.Name+++++RLen++TDp.....Functions+++++

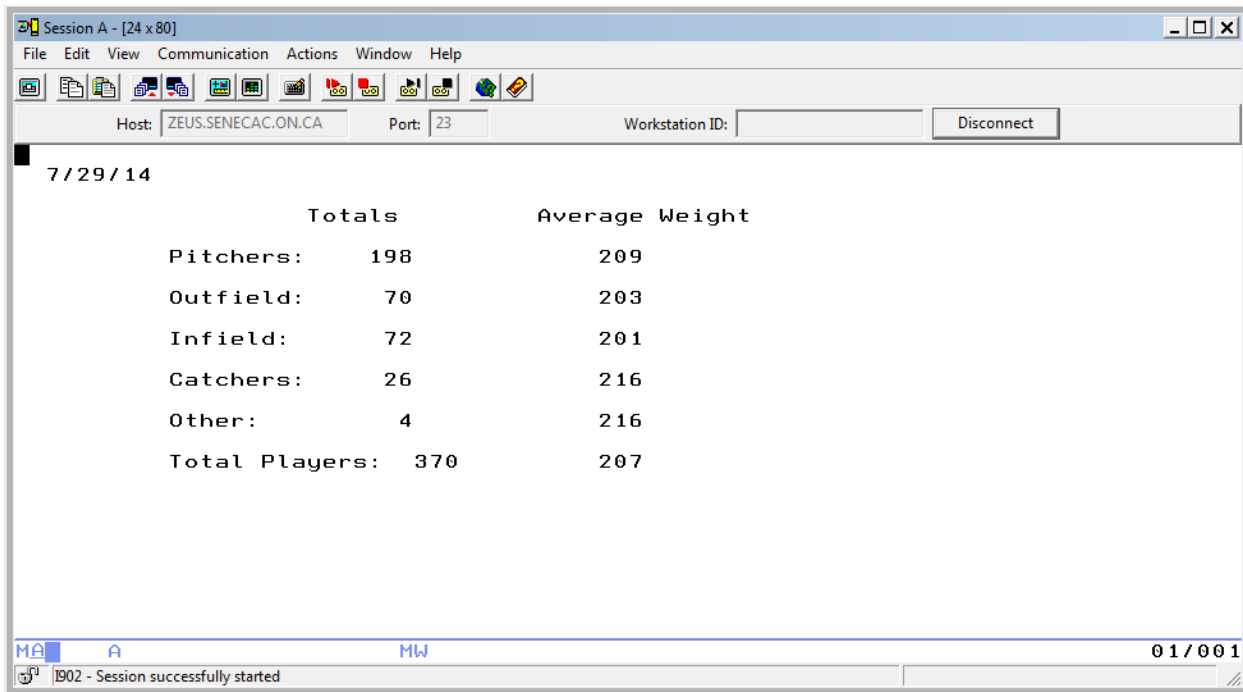
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SAMPLE SCREEN SHOTS:

OUTPUT: Display File - BBALLDSP

CALL PLAYERINFO PARM(' *YES ')

*YES indicates that all records will be processed but only the summary screen will be shown.



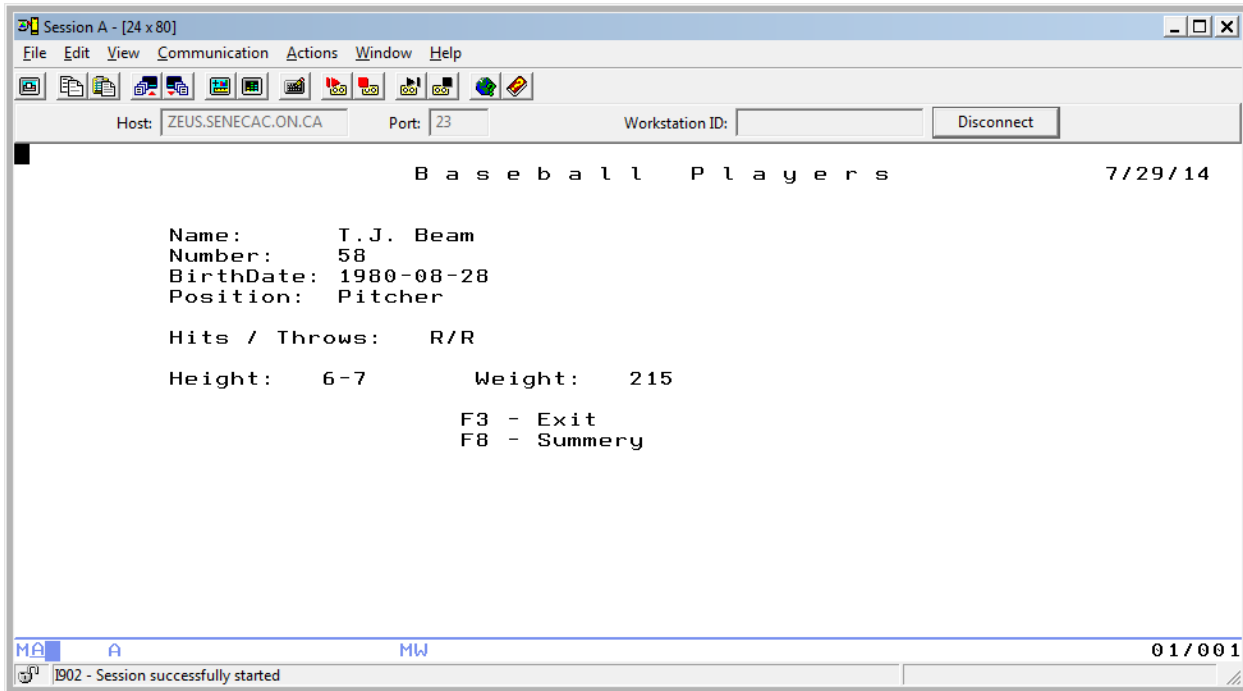
	Totals	Average Weight
Pitchers:	198	209
Outfield:	70	203
Infield:	72	201
Catchers:	26	216
Other:	4	216
Total Players:	370	207

RECORD 2 (SUMMARY SCREEN)

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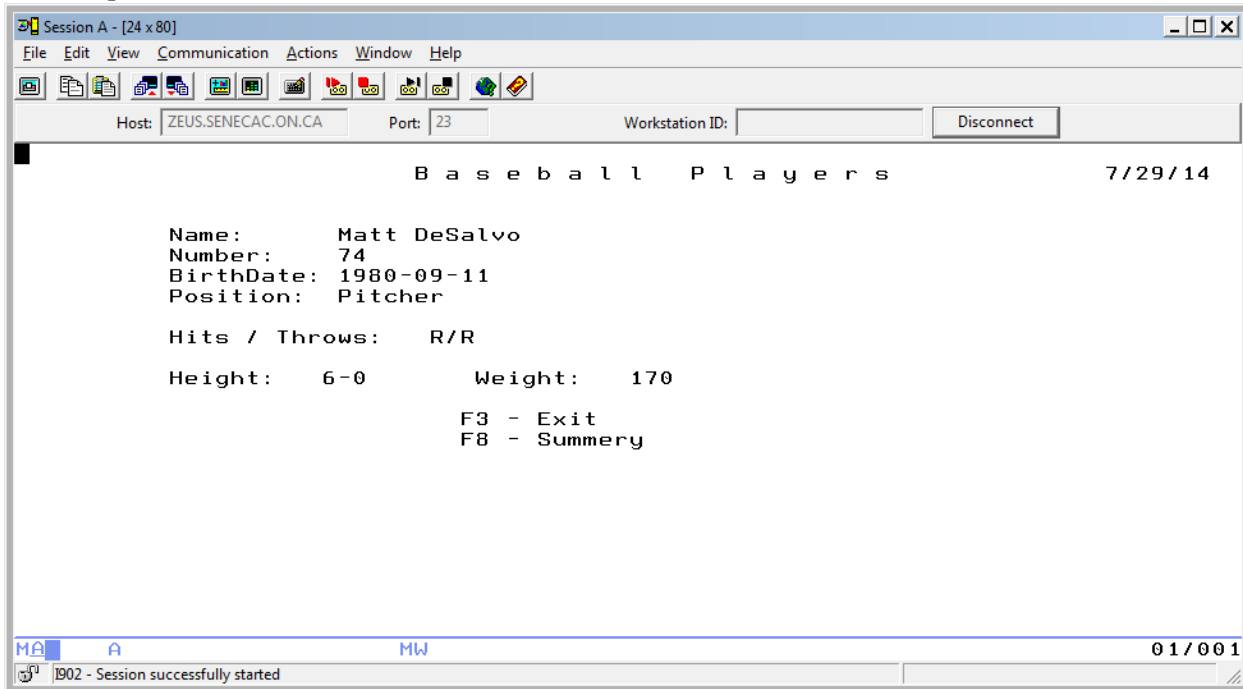
CALL PLAYERINFO PARM(' *NO')

*NO indicates that each record will be displayed and the user can press either the enter key to see the next record; the F3 key to see a summary screen for the records that have been viewed; or F8 to see a summary screen for the records that have been viewed plus the rest of the records in the file.



RECORD 1 (First Detail Screen)

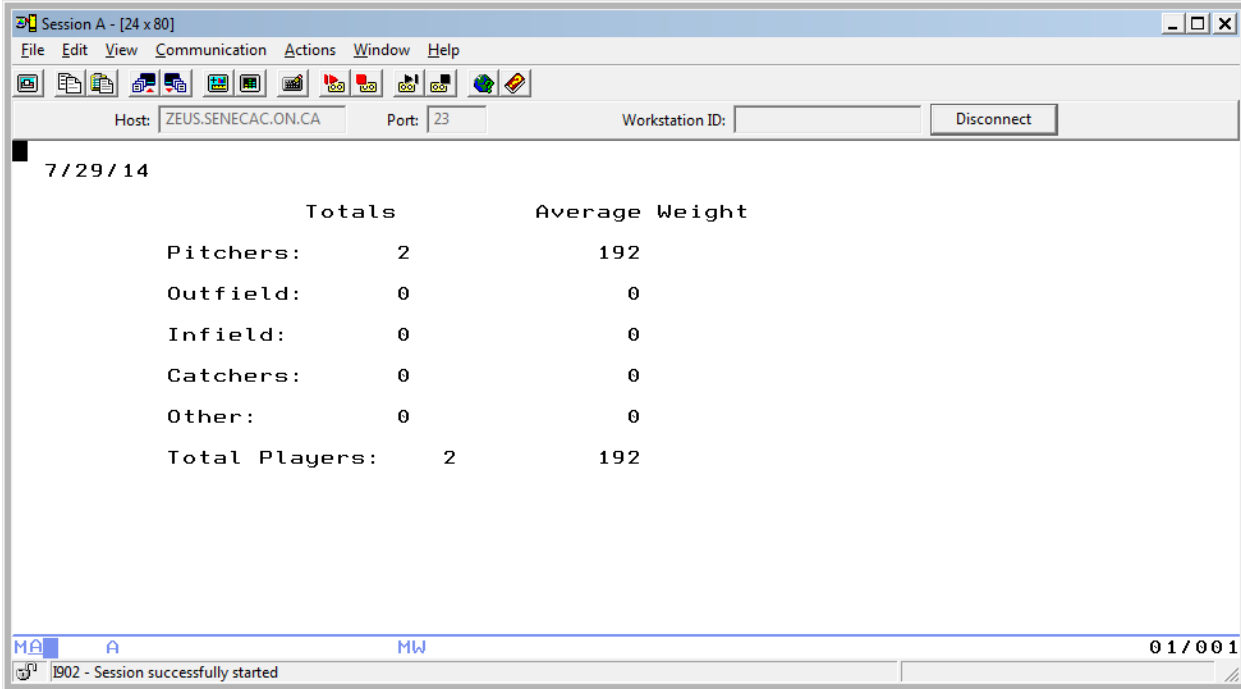
ENTER pressed to see the next record



RECORD 1 (Next Detail Screen)

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F3 pressed



Session A - [24 x 80]

File Edit View Communication Actions Window Help

Host: ZEUS.SENECAC.ON.CA Port: 23 Workstation ID: Disconnect

7/29/14

	Totals	Average Weight
Pitchers:	2	192
Outfield:	0	0
Infield:	0	0
Catchers:	0	0
Other:	0	0
Total Players:	2	192

MA A MW 01/001

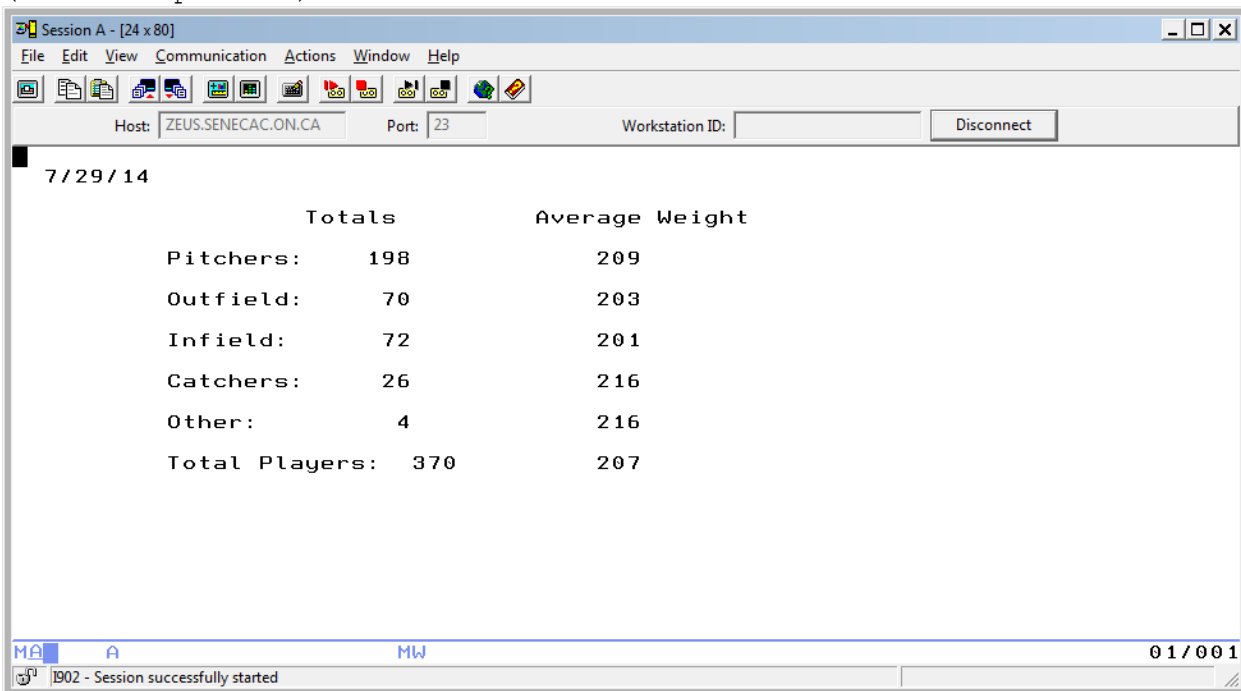
1902 - Session successfully started

RECORD 2

OR

The first record was viewed, enter was pressed so the second record was viewed, then F8 was pressed and the rest of the records were processed but not individually displayed.

(after F8 pressed)



Session A - [24 x 80]

File Edit View Communication Actions Window Help

Host: ZEUS.SENECAC.ON.CA Port: 23 Workstation ID: Disconnect

7/29/14

	Totals	Average Weight
Pitchers:	198	209
Outfield:	70	203
Infield:	72	201
Catchers:	26	216
Other:	4	216
Total Players:	370	207

MA A MW 01/001

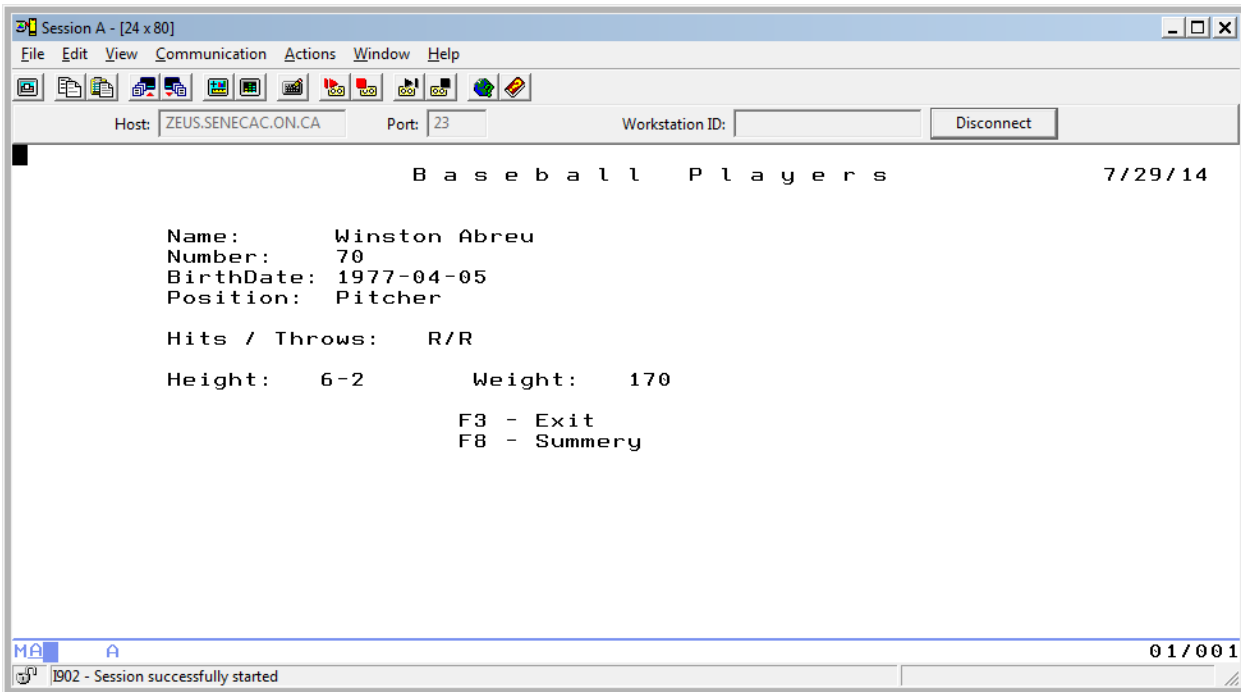
1902 - Session successfully started

RECORD 2

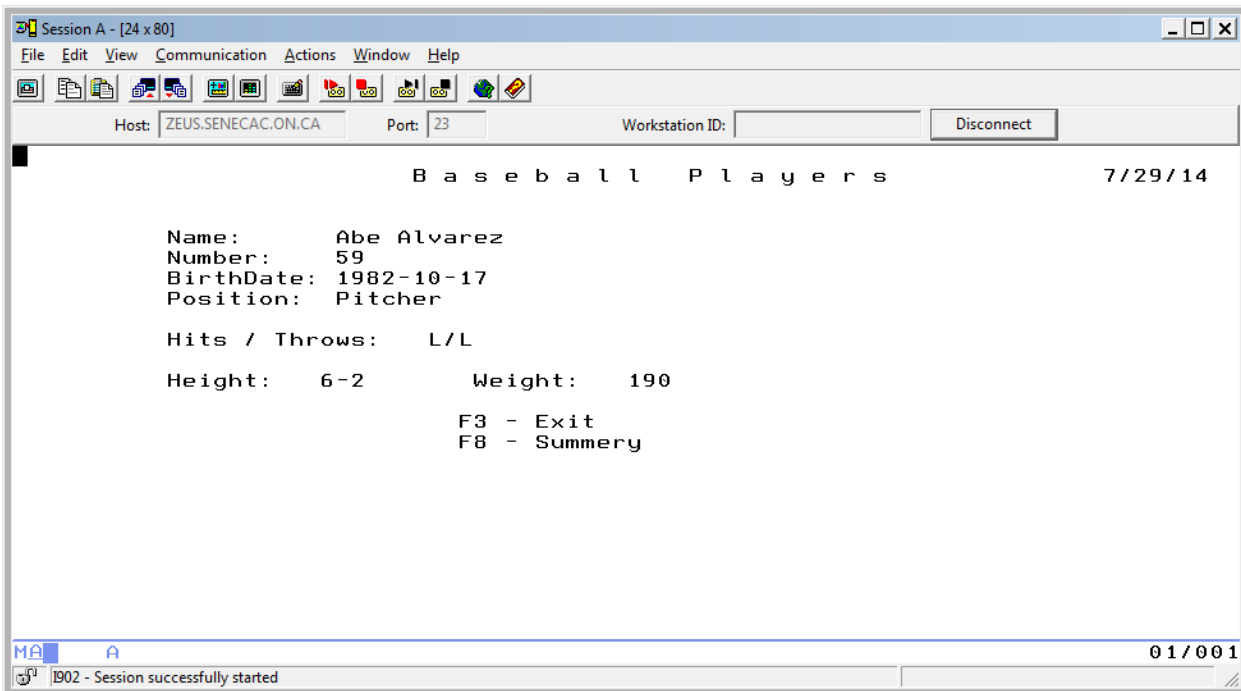
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CALL DSPPLYRSP PARM('*PITCHERS' '*NO')

Only pitchers show each time you press enter.
Pitchers show in alphabetical order by last name.



RECORD 1 (First Detail Screen)

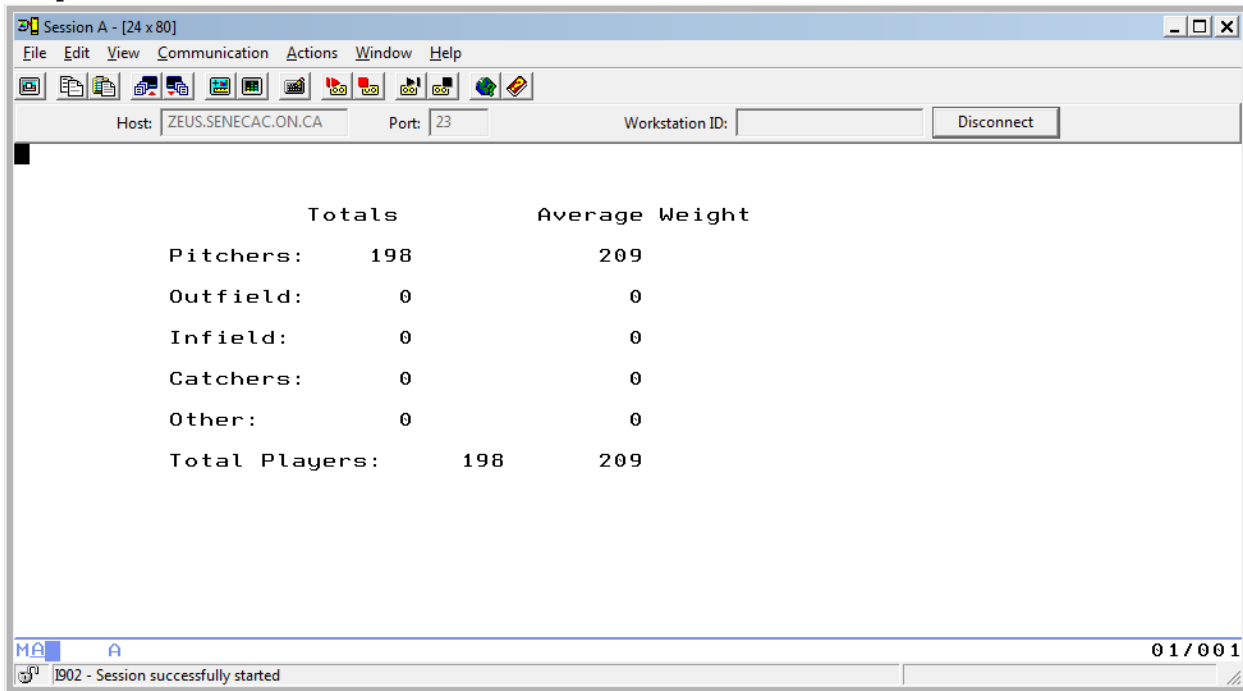


RECORD 1 (Next Detail Screen)

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F3 would show summary info for the two pitchers, F8 would show summary info for all pitchers

F8 pressed



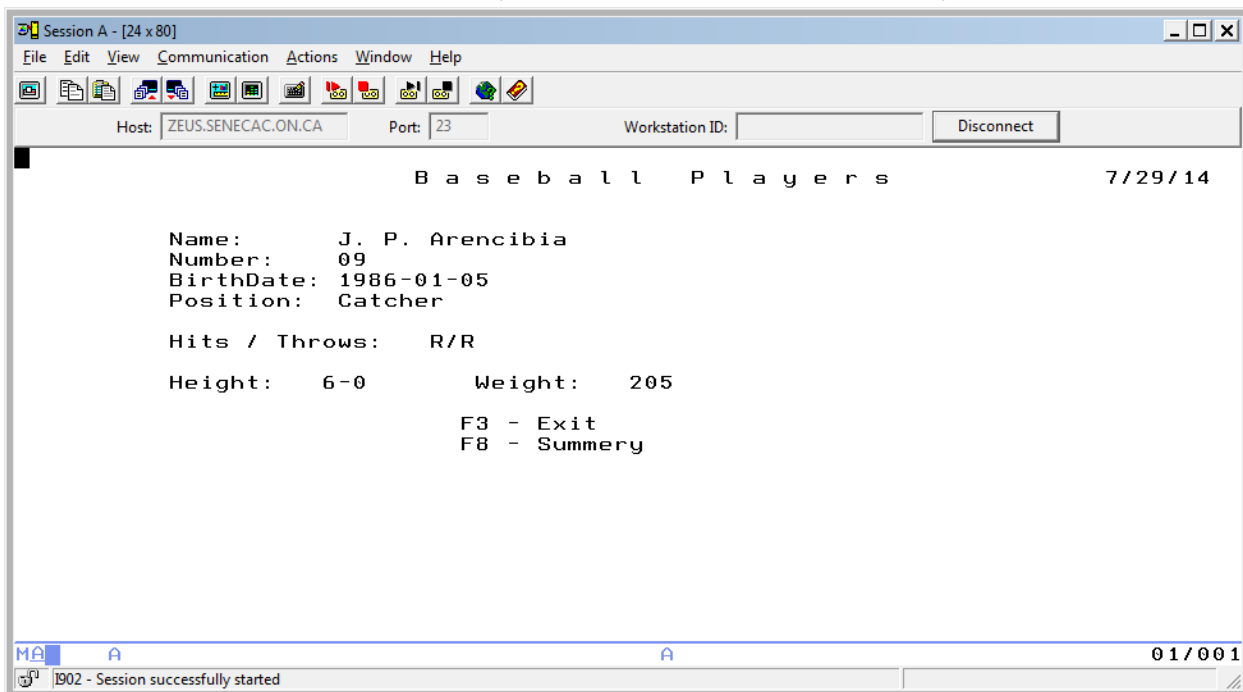
	Totals	Average Weight
Pitches:	198	209
Outfield:	0	0
Infield:	0	0
Catchers:	0	0
Other:	0	0
Total Players:	198	209

MA A 01/001

1902 - Session successfully started

RECORD 2

CALL DSPPLYRSP PARM(' *CATCHERS' ' *NO')



Baseball Players 7/29/14

Name: J. P. Arencibia
Number: 09
BirthDate: 1986-01-05
Position: Catcher

Hits / Throws: R/R

Height: 6-0 Weight: 205

F3 - Exit
F8 - Summary

MA A 01/001

1902 - Session successfully started

RECORD 1

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Display File: BBALLDSP

```

A                                CF03(03 'EXIT')
A                                CF08(08 ' SUMMARY')
A      R RECORD1
A      HEIGHT      R      O 12 21REFFLD(AMERICANLG/HEIGHT +
A                                BASEBALL08/AMERICANLG)
A      BIRTHDATE R      O  7 22REFFLD(AMERICANLG/BIRTHDATE +
A                                BASEBALL08/AMERICANLG)
A      WEIGHT      R      O 12 41REFFLD(AMERICANLG/WEIGHT +
A                                BASEBALL08/AMERICANLG)
A      HITSTROWSR      O 10 28REFFLD(AMERICANLG/HITSTROWS +
A                                BASEBALL08/AMERICANLG)
A      NUMBER      R      O  6 22REFFLD(AMERICANLG/NUMBER +
A                                BASEBALL08/AMERICANLG)
A                                14 30'F3 - Exit'
A                                15 30'F8 - Summery'
A                                12 11'Height:'
A                                12 31'Weight:'
A                                7 11'BirthDate:'
A                                5 11'Name:'
A                                10 11'Hits / Throws:'
A                                8 11'Position:'
A      FULLNAME      21      O 5 22
A      PPOSITION      8      O 8 22
A                                2 27'B a s e b a l l   P l a y e r s'
A                                2 71DATE
A                                EDTCDE(Y)
A                                6 11'Number:'
A      R RECORD2
A      TOTALPITCH      3 00  6 24EDTCDE(1)
A      TOTALOUT      3 00  8 24EDTCDE(1)
A      TOTALIN      3 00 10 24EDTCDE(1)
A      TOTALCATCH      3 00 12 24EDTCDE(1)
A                                4 20'Totals'
A                                8 11'Outfield:'
A                                10 11'Infield:'
A                                12 11'Catchers:'
A                                14 11'Other:'
A      TOTALOTHER      3 00 14 24EDTCDE(1)
A                                16 11'Total Players:'
A      TOTALPLAY      3 00 16 30EDTCDE(1)
A                                4 35'Average Weight'
A                                6 11'Pitchers:'
A      AVGPITCH      3 0  6 39EDTCDE(1)
A      AVGOUT      3 0  8 39EDTCDE(1)
A      AVGIN      3 0 10 39EDTCDE(1)
A      AVGCATCH      3 0 12 39EDTCDE(1)
A      AVGOTHER      3 0 14 39EDTCDE(1)
A      AVGPLAY      3 0 16 39EDTCDE(1)

```

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Processing:

The screen dialog above indicates some of the processing with the enter key, F3 key and F8 key. When individual player records are being shown on the screen, the first and last names are stored in a calculated field for the full name.

The position of 'P' is converted to a calculated field containing 'Pitcher'. 'C', 'O', 'I' are converted to 'Catcher', 'Outfield' and 'Infield'.

Total counts are maintained for pitchers, catchers etc and average player weight for each position is determined.

File Type	FT (IOUC)	Record Length	RL
File Designation	FD (PSRTF)	Record Address Type	RAT (ADFKPDZ)
End of File	EF	Device	(Printer,Disk,Workstn)
File Addition	FA	Keywords	
File Format	FF (FE)		

Filename	FT	FD	EF	FA	FF	RL	RAT	Device	Keywords
F_____	___	___	___	___	___	___	___	___	_____
F_____	___	___	___	___	___	___	___	___	_____

Declaration Type - Blank, DS, C, PI, PR, S, S/U - Blank, S, U
 Keywords - ALIGN, DTAARA, EXPORT, EXTNAME(), EXTPGM(), FROMFILE(), OCCURS()

D* P A S S E D P A R A M E T E R (Only Summary Screen)

D* W O R K F I E L D S

Name	S/U	Declaration Type	To/From	Data Length	Decimal Type	Pos	Keywords
D_____	___	___	___	___	___	___	_____
D_____	___	___	___	___	___	___	_____
D_____	___	___	___	___	___	___	_____
D_____	___	___	___	___	___	___	_____
D_____	___	___	___	___	___	___	_____
D_____	___	___	___	___	___	___	_____
D_____	___	___	___	___	___	___	_____
D_____	___	___	___	___	___	___	_____
D_____	___	___	___	___	___	___	_____
D_____	___	___	___	___	___	___	_____

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RPGLE program: PLAYERINFO

/FREE

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CLLE Driver Program for RPGLE program

```
PGM      PARM ( _____ )

          DCL      _____
          DCL      _____

ADDLIBLE _____

          _____

SELECT
  WHEN ( _____ ) DO

          _____

          _____

          ENDDO

          WHEN

          WHEN

          WHEN

          ENDSELECT
ENDPGM
```

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Command Programming

Assuming the code has already been supplied in a source physical file called BBALLAPSRC for PLAYERINFO.RPGLE, DSPPLYRS.CMD, and DSPPLYRSP.CLE: and DSPPLYRS has already been successfully compiled — provide the command being run to connect these two and the missing information for the prompts.

_____ (command run)

Type choices, press Enter.

Command	_____	Name
Library	_____	Name, *CURLIB
Program to process command . . .	_____	Name, *REXX
Library	_____	Name, *LIBL, *CURLIB
Source file	_____	Name
Library	_____	Name, *LIBL, *CURLIB
Source member	<u>*CMD</u>	Name, *CMD

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DSPBBLPLY (F4)

DISPLAY BASEBALL PLAYERS (DSPPLYRS)

Type choices, press Enter.

WHICH SET OF PLAYERS? _____ *ALL, *PITCHERS, *CATCHERS...
ONLY SHOW SUMMARY INFORMATION? *NO *YES, *NO

F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display Bottom
F24=More keys
Parameter PLAYERTYPE required.

The command entered below shows with keyword notation and the default value being overridden.
The user must indicate which set of players are to be reported on.

==> DSPPLYRS PLAYERTYPE(*PITCHERS) SUMMARY(*YES)

Using some or all of the following, provide the command source code for DSPPLYRS.CMD

CMD 'XXXX',PARM,KWD(),MIN(),SPCVAL(),TYPE(),LEN(),RSTD(),VALUES(),QUAL(),PROMPT()

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CL commands and Syntax:

Command	Parameter keyword(s)	Command	Parameter keyword(s)
ADDLIB	LIB POSITION	RCVF	DEV RCDFMT OPNID WAIT
CALL	PGM PARM	RMVLIB	LIB
CALLPRC	PRC PARM RTNVAL	RTVJOBA	DATE USER
CHGCURLIB	CURLIB	RTVSYSVAL	SYSVAL RTNVAR
CHGLIBL	LIBL CURLIB	RTVUSRPRF	RTNUSRPRF TEXT MAXSTG STGUSED PWDEXPITV OUTQ OUTQLIB
CHGVAR	VAR VALUE	RUNQRY	QRY QRYFILE OUTTYPE OUTFORM RCDSLT
DCL	VAR TYPE LEN VALUE	RVKOBJAUT	OBJ OBJTYPE ASPDEV USER AUT AUTL
DCLF	FILE RCDFMT OPNID	SELECT	
DO		SNDMSG	MSG TOUSR
DOFOR	VAR FROM TO BY	SNDUSRMSG	MSGRPY
DOUNTIL	COND	SELECT	
DOWHILE	COND	SNDMSG	MSG TOUSR
DSPMSG		SNDPGMMMSG	MSG
DSPSPLF	SPLNBR(*LAST)	SNDRCVF	DEV RCDFMT OPNID WAIT
EDTOBJAUT	OBJ OBJTYPE ASPDEV	SNDUSRMSG	MSG MSGID MSGF MSGDTA VALUES MSGTYPE TOMSGQ TOUSR MSGRPY
EDTLIBL		WHEN	COND THEN
ELSE	CMD	WRKOUTQ	OUTQ
ENDDO		WRKSPLF	
ENDPGM			
ENDSELECT			
GOTO	CMDLBL	String Handling	
GRTOBJAUT	OBJ OBJTYPE ASPDEV USER AUT AUTL REFOBJ REFOBJTYPE REFASPDEV REPLACE	%SST(&FIELD offset length) &STRINGA *CAT &STRINGB &STRINGA *BCAT &STRINGB &STRINGA *TCAT &STRINGB	
IF	COND THEN	Indicators	&IN03
MONMSG	MSGID CMPDTA EXEC		
PGM	PARM		
OTHERWISE	CMD		
OVRDBF	FILE TOFILE LVLCHK		
OVRPRTF	FILE SPLFNAME		

RPG Verbs, Functions and Special Values

RPG	Attribute	RPG	Attribute	RPG	Attribute
%EOF	File Name	*ENTRY		RENAME(recordformat:newformat)	
DOU	Condition	PLIST			
DOW	Condition	PARM		%TRIMR(fieldname)	
ENDDO		*IN03			
ENDIF		EXSR			
ENDSL		BEGSR			
EXFMT	Record name	ENDSR			
IF	Condition	*INLR = *ON			
OTHER		OFLIND(*INOF)			
READ	File Name	WRITE	Record name		
SELECT		WHEN	Condition		