CS2230 Spring 2014 Dr. Lily Chang

Program #2

Salary Increase Detail Report

25 points; Due March 26 (Wednesday) by 5pm

Problem Description

International Cherry Machine Company (ICM) is working on giving pay raises to the employees. Not everyone is going to get the same pay increase. In fact, some are not getting any pay increase. Management has created a decision table that lists the criteria to be used to determine percentage increases. Your job is to write a program to create a report that shows the old salary and the new salary. If the employee does not meet the criteria, they do not receive an increase.

Input

The input data for this program is stored in a line sequential file called **employee.dat**. The layout for the employee records containing the payroll are as follows.

Employee Payroll Records Layout (size: 48 bytes)										
Field	Size	Type	Decimal							
EMPLOYEE NO	5	Alphanumeric	-							
EMPLOYEE NAME	20	Alphanumeric	-							
LOCATION CODE	GROUP		-							
TERRITORY NO	2	Alphanumeric	-							
OFFICE NO	2	Alphanumeric	-							
ANNUAL SALARY	6	Numeric	0							
SOCIAL SECURITY NO	9	Alphanumeric	-							
NO OF DEPENDENTS	2	Alphanumeric	-							
JOB CLASSIFICATION CODE	2	Alphanumeric	-							

Output

Create a report file named **employee.rpt** based on the design given in the printer spacing chart below. Your report should print headers and page numbers on top of each page. No more than **55 total lines** on a page, including the headers. Your program should also print the summary totals for annual salary, increase amount and new salary on the last page of the report. A sample report is posted on D2L.

Printer Spacing Chart

	-	2 0	,	4 "	9 6			0	10	=	12	13	4	1 4	5 4	ا ٥		9	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	8	900	40	14	42	1 2	44	45	2 4	140	4	84	94	202	21	202	20 2	4 2	292	57	28	29	09	61	62	63	64	65	99	67	89	69	02	7	- 22	3 65	44	14	0 6	9	\ 	8/	29	80
1	D	A.	τĮI	E	: [N	ıM	1 /	C	D	1	Y	1	/	ľ	Y	П			П	П	П	П	T	N	Т	Ε	R	N	Α	т	T	0	N	I A	L	T	C	ŀ	ΙE	R	R	Y	1	N	1 4	4	C	Н	H	N	E	-	C	ON	۱P	A	N	Y	Т	Г	Г		Г	Г	Г	Г			Г	Г	Т	P	A	1	G	Ε	Ţ	z	z	9
2	Т	1 1	ИΙ	E	: [9	9	:	9	9	Г	Г	Τ	Τ	Τ	T	П			\Box	╗	П	П					s	Α	L	Α	R	Y	Γ	I	N	ıC	F	₹ E	Α	S	E	Т	C	E	Ī	T	A	T	니	Т	R	ΕI	P) F	₹ T	Τ	Г	Г	Г	Г	Г	Г	Г	Г	Г	Г	Г	Г	Γ	Т	Y	/ C	l	JE	R	T	N	A	М	E
3	Т	Т	Т	Т	Τ	Τ	Τ	Т	Г	Г	Г	Г	Τ	Τ	Τ	Т	П	П		П	П	П	П							Г	Г	Г	Г	Г	Τ	Т	Τ	Τ	Τ	Г	Г	Г	Τ	Τ	Τ	Τ	Т	Т	Т	Т	Т	Т	Т	Τ	Τ	Τ	Т	Г	Г	Г	Г	Г		Г	Г	Г	Г	Г	Г	Т	Т	Т	Τ	Т	Τ	Т	Т	Т	П	J	٦
4	ΕĮ	М	P	L))	/ E	E	Π	E	M	P	L	. 0	'n	r I	ΕĪ	E					\Box	П							0	F	F	ı	С	E	Π	J	C	E	3	Г	Γ	Α	N	1	١	U	A	L	T	T	P	ΕĮ	R	; .	T	Ι	Γ	Г	Α	М	Т					Π			Γ	Τ	Τ	Τ	Ι	Ι	Ţ	N	E۱	W	J]
5	Т	П	N	U	1	Τ	Τ	Τ	N	ΙA	M	E	Τ	Τ	Τ	Т	П			П	П	П	П								Г	N	0		Τ	Τ	C	; C) [E	Г	Г	S	A	\ L	- 4	A	R	Υ	Т	Τ	П	N	C	₹.	Τ	Τ	I	N	C	R	E	Α	S	E	Π	Π			Γ	Τ	Τ	Τ	Τ	1	S	٩I	L	A	R	Υ
6	Т	Т	Т	Т	Τ	Τ	Τ	Τ	Γ	Г	Γ	Γ	Τ	Τ	Τ	Т	П			П	П	П	П								Г	Г	Г	Г	Τ	Τ	Τ	Τ	Τ	Г	Г	Г	Τ	Τ	Τ	Τ	Т	Т	Т	Т	Τ	Т	Т	Τ	Τ	Τ	Τ	Γ	Г	Γ	Г	Γ		Г		Γ	Γ			Γ	Τ	Τ	Τ	Τ	Τ	Т	Т	Т	П	J	П
7	T	X :	X	X Z	()	(T	Т	Т	×	X	X	X	()	()	()	X	x	X	х	х	х	X	X	х	Х	X	X	Х	X	Г	Г	Х	X	Г	Т	Т	×	()	1	Т	Г	\$	z	Z	<u> z</u>	<u>.</u> [,	Ī	z i	z	9	Т	9	. !	9 9	%	\$	Z	z	١,	z	z	9		9	9	Т	Г	\$	\$	Τ,	\$	\$	\$	Ι,	. \$	\$ 3	\$ 5	9	╗	9	9
8	Т	Т	Т	T	Τ	Τ	Τ	Τ	Γ	Г	Г	Γ	Τ	Τ	Τ	T	П					\Box	П								Г			Г	Ι	Ι	Τ	Τ	Τ	Γ	Г	Γ	Ι	Τ	Τ	Τ	Т	Т	\Box	Т	Ι	Т	Τ	Τ	Τ	Τ	Ι	Γ	Г	Γ						Г	Π			Γ	Τ	Τ	Τ	Τ	Τ	Τ	Τ	I	П	J	J
9	T	X :	X	X Z	()	(Τ	Τ	X	X	X	X	()	()	()	X	X	X	Х	х	х	X	X	х	Х	X	X	Х	X	Г	Г	Х	X	Г	Τ	Τ	×	()	(Г	Г	\$	Z	: z	Z	z	,	Z.	z	9	T	9	. !	9 9	%	\$	Z	z	١,	z	z	9		9	9	Г	Г	\$	\$	Τ,	\$	\$	\$	Ι,	. \$	\$ 3	\$ 5	9		9	9
10	1	T	T		Τ	Τ	Τ	Τ	Γ	Г	Г	Π	Τ	T	T	Ī						T											Г	Г	Τ	Π	Τ	Τ	Τ	Γ	Г	Γ	Τ	Τ	Τ	Τ	T	T	T	Ť	T	T	T	T	Τ	Τ	Τ	Г	Π	Г		Γ		Г		Г	Π			Γ	Τ	Τ	Τ	Τ	Τ	T	T	I	T	J]
11				\perp	\perp	I	\perp		L	L		L	I	I	Ι	I									T	0	T	Α	L	s					L		I	I	\$	\$	\$,	\$	\$	\$	\$,	\$	\$	9	I			\$ \$	δ,	\$	\$	\$,	\$	\$	9		9	9		\$	\$	\$,	\$	\$	\$,	, \$	\$ 3	\$ 9	9		9	9

CS2230 Spring 2014 Dr. Lily Chang

Computation

NEW SALARY = ANNUAL SALARY + (ANNUAL SALARY * percentage increase)

Use the following decision table to find out the percentage to be increased.

If the OFFICE NO is	and, the JOB CLASS. CODE is	Percentage increase is
02, 04, 06	All codes	3 %
01	01, 02 only	3.5 %
01	All but 01, 02	none
02	03	3 %
03	All but 03	3.5 %
05	01, 03 only	none
03	All but 01, 03	3.5%
07	01	3 %
07	All but 01	4 %
All other OFFICE NO	-	none

Hint

- 1. Start your program with input/output only without the computation part.
 - ENVIRONMENT DIVISION: define SELECT statements
 - DATA DIVISION: define (1) FD in the FILE SECTION. (2) output records in the WORKING-STORAGE SECTION.
 - PROCEDURE DIVISION: write the paragraph 000-MAIN that outlines the steps of creating the report, and includes paragraphs that perform (1) OPEN (2) READ (3) WRITE and (4) CLOSE.
- 2. If your program is running the input/output data correctly, add the paragraph deals with the percentage based on the decision table. Check the report file created if the percentage is correct. You can use **WordPad or Notepad++** to open the report file.
- 3. If your report is generating the percentage correctly, then add the statements that compute new salaries.
- 4. Enhance the WRITE paragraph to output a complete record.
- 5. Enhance your program to deal with the <u>page control</u>, including <u>counting the lines</u> printed on a page, advancing to a new page, and printing the headers.

Requirement

- 1. Upload your source code *.cbl to the Dropbox Program 2 on D2L. <u>0 points</u> if not uploaded.
- 2. In order to get the credit for this programming assignment, the report generated by your source code MUST MATCH the design in the printer spacing chart, and show the correct salary increases. <u>Up to 5 points off</u> if not matching the design on the printer spacing chart. <u>2 points off</u> if not skipping pages correctly (55 lines per page). <u>0 points</u> if the amount increased and new salaries are incorrect.
- 3. **Modularity.** No more than 10 lines in paragraph 000-MAIN (2 points off). No more than 30 lines in all paragraphs (0.5 points off each violation, up to 2 points off).
- 4. **Programming Style.** Follow the guidelines on D2L. The grading table in the programming guidelines will be used to grade your program.
- 5. Late penalty: 10% off total points earned on program 2 for every 12-hours late. I don't count the days during the spring break.