JCL Interview Questions

siteS

<http://www.allinterview.com/Interview-Questions/JCL.html>

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Questions and their Explanation

**Q. wht do u mean by (\*,intrdr) wht is \* used for ?**

ANS. (\*,intrdr) is used to submit jcl from cobol program by  
coding it as   
//seqflo dd sysout=(\*,intrdr),where seqflo is the file name  
which contains the jcl statements to be submitted.  
Here \* represents the same msgclass coded in the job step.

And

This is also used in IEBEDIT as an alternate to COND for   
submitting slective Steps of jcl

**Q. Suppose i have a file with 10 recs and i want to skip only the 7 th record and copy the rest into another file. How do i do it using SORT?**

ANS.

//UGBSORSK JOB AF-1055,'SKIP 7RC',

// MSGCLASS=X,MSGLEVEL=(1,1),

// CLASS=P,NOTIFY=&SYSUID

//\*

//SORT001 EXEC PGM=SORT

//SYSOUT DD SYSOUT=\*

//SYSPRINT DD SYSOUT=\*

//SORTIN DD DSN=SDAF.NANI.IN.SE,DISP=SHR

//SORTOF1 DD DSN=&&TEMP1

//SORTOF2 DD DSN=SDAF.NANI.OUT.SE,DISP=OLD

//SYSIN DD \*

SORT FIELDS=COPY

OUTFIL FILES=1,STARTREC=7,ENDREC=7

OUTFIL FILES=2,SAVE

END

/\*

HERE SORTOF1 WHICH IS a temp file will have the skipped 7th rec.

All the desired records go into sortof1.

**Q.How to find the length of variable length copybook using fileaid ??**

ANS. Type the **command USE on command prompt** which will show a list of available record lay-outs and you can choose one from them.

**Q.In your JCL, run the even numbered steps if date is even and run odd numbered steps if date is odd . Where do you generate the date ??in cobol or JCL ??**

**ANS.**

**Q. what is the sortcard for comparing two files with a field key and get the duplicates in onefile and noduplicates in another file**

**ANS.**

**//SYSIN DD \***

**JOINKEYS F1=INDD1,FIELDS=(1,22,A)**

**JOINKEYS F2=INDD2,FIELDS=(1,22,A)**

**JOIN UNPAIRED,F1,F2**

**REFORMAT FIELDS=(?,F1:1,22,F2:1,22)**

**OPTION COPY**

**OUTFIL FNAMES=MATCH,INCLUDE=(1,1,CH,EQ,C'B'),BUILD=(1:2,22,23:562X)**

**OUTFIL FNAMES=UNMATCH1,INCLUDE=(1,1,CH,EQ,C'1'),BUILD=(1:2,22,23:562X)**

**OUTFIL FNAMES=UNMATCH2,INCLUDE=(1,1,CH,EQ,C'2'),**

**BUILD=(1:24,22,23:562X)**

**/\***

//ICEDUP01 JOB AF-1055,'ICET DUP',

// MSGCLASS=X,MSGLEVEL=(1,1),

// CLASS=P,NOTIFY=&SYSUID

//\*this pgm is used to find duplicates in same file(sortin)

//SORT001 EXEC PGM=ICETOOL

//DFSMSG DD SYSOUT=\*

//TOOLMSG DD SYSOUT=\*

//SYSOUT DD SYSOUT=\*

//SYSPRINT DD SYSOUT=\*

//SORTIN DD DSN=SDAF.NANI.P732083.INPUT.SE,DISP=SHR

//SORTOUT DD DSN=SDAF.NANI.SORTOUT.SE,DISP=OLD

//SORTXSUM DD DSN=SDAF.NANI.SORTXSUM.SE,DISP=OLD

//SORTWK01 DD DISP=(NEW,DELETE),

// UNIT=SYSDA,SPACE=(CYL,(3335,3335))

//TOOLIN DD \*

SELECT FROM(SORTIN) TO(SORTOUT)-

ON(1,22,CH) -

FIRST DISCARD(SORTXSUM)

/\*

//SORTDUP1 JOB AF-1055,'SORT DUP',

// MSGCLASS=X,MSGLEVEL=(1,1),

// CLASS=P,NOTIFY=&SYSUID

//\* this pgm is used to ELIMINATE duplicates in same file(sortin)

//SORT001 EXEC PGM=SORT

//SYSOUT DD SYSOUT=\*

//SYSPRINT DD SYSOUT=\*

//SORTIN DD DSN=SDAF.NANI.P732083.INPUT.SE,DISP=SHR

//SORTOUT DD DSN=SDAF.NANI.SORTOUT.SE,DISP=OLD

//SYSIN DD \*

SORT FIELDS=(1,22,CH,A)

SUM FIELDS=NONE

/\*

**Q. How to submit multiple jobs. These jobs are members in PDS. The second job should run if the first job runs successfully and so on**

**ANS**

We use **IEBGENER** and cond parameter like **COND(4,LT)**

//JS999 EXEC **PGM=IEBGENER,COND=(4,LT)**//SYSIN DD DUMMY   
//SYSUT1 DD DSN=<Input PDS containing the Job members>   
// DISP=SHR   
//SYSUT2 DD SYSOUT=(L,INTRDR)   
//SYSPRINT DD SYSOUT=\*

**Q. I have multiple jobs ( JCLs with several JOB cards ) in a**

**member. What happens if I submit it?**

**ANS.**

We have put number of job card in a single JOb. It will   
treat each Job card as a new Job. So if you put 10 Jobcard   
statement,means you are submitting 10 Jobs. Each job can have 255 steps.

code the JCLs in ome member, end with // for each JCL   
when you submit the member, JES will handle them

**Q. How to find out the number of records in a file using JCL**

**ANS.**

//SYSIN DD \*

SORT FIELDS=COPY

OUTFIL FILES=OUT,

**TRAILER1=(1:COUNT),REMOVECC,NODETAIL**

/\*

**Q. is there any way to execute more than one proc in the same exec statement at the same time..?**

**ANS**

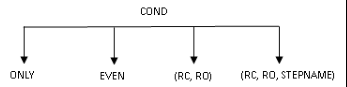
**Q.My Question is 1. How to cound no. of records in JCL. Please explain with an example. 2. How to execute only odd steps in JCL? I know EDIT TYPE = Inculde, Step Name = 1,3,5 and COND code for all even step. Anyone knows other than this.**

**ANS.**

**Q.Hi, Please clear me when COND=ONLY and COND=EVEN. Explain me with example.**

**ANS** [**http://www.mainframestechhelp.com/tutorials/jcl/page7.htm**](http://www.mainframestechhelp.com/tutorials/jcl/page7.htm)

If condition is coded   both the statements job card condition overrides the condition code of step.

****

**COND=ONLY**

If the previous step execution results in abnormal condition only then the subsequent step must be executed.

//JOB CARD

//S1 EXEC PGM=P1

//S2 EXEC PGM=P2

//S3 EXEC PGM=P3,COND=ONLY

//S4 EXEC PGM=P4

**Output:**

**Step Status**

P2 Executed Not Executed

P3 Not Executed Executed

In the above example, it will always check the execution status of the S2 and if it is abended, then S3 step should get executed.

**COND=EVEN**

If the previous step execution results in normal or abnormal condition then the subsequent step get executed.

//JOB CARD

//S1 EXEC PGM=P1

//S2 EXEC PGM=P2

//S3 EXEC PGM=P3,COND=EVEN

//S4 EXEC PGM=P4

**Output:**

**Step Status**

P2 Executed Not Executed

P3 Should Execute Should Execute

**Q.if in a job, region is mentioned in both jobcard and in step then which is cosidered at the step level? A job has region 4k in jobcard and step1 with region 0k and step2 with 16k, then what is the region allocated for the entire job? what is the region step1 takes? what is the region step2 takes?**

**ANS.**

If we specify the region parameter in both job card and execution statement the value in job card overrides the value in EXEC statements.

Region allocated for entire job is 4k

Region allocated for step1 is 4k and step2 is 4k

**Q.What is the job entry system used in your project? based on what criteria the sequence of jobs are picked if priority is not mentioned in the job card?**

**ANS.**

**Q. what is the job entry system used in your project?**

**ANS.** We are using JES2 in our project.

**Q. I have four steps in jcl they are STEP1,STEP2,STEP3 and STEP4.**

**Can it possible to run the reverse order like step4 first**

**then step3,step2,step1?**

**ANS.**

JCL processes steps sequentially i mean to say we have ways

to skip steps but we don't have a way to run steps in

reverse or random way. EX; i have a job with steps 1, 2, 3.

Executing steps 3, 1, 2 is not at all possible.

If you want to do EXECUTE ONLY STEP3 AND STEP 4 write a new JCL with

IEBEDIT utility. Here is the JCL.

**//JOBCARD AS PER INSTALLATION**

**//STEP1 EXEC PGM=IEBEDIT**

**//SYSPRINT DD SYSOUT=\***

**//SYSUT1 DD DSN=FILE1,DISP=SHR**

**//SYSUT2 DD SYSOUT=(\*,INTRDR)**

**//SYSIN DD \***

**EDIT TYPE=INCLUDE,STEPNAME=(STEP4,STEP3)**

**/\***

**//**

Here file1 can either be PDS/PS that holds the actual JCL.

Type=Include will copy the steps specified in the sequence

as per STEPS parm

**Q. I want to join to input files and write the matching fields on to an output file but i dont want the output file a sorted one**

**ANS.**

//SYSIN DD \*

JOINKEYS F1=INDD1,FIELDS=(1,22,A)

JOINKEYS F2=INDD2,FIELDS=(1,22,A)

JOIN UNPAIRED,F1,F2

REFORMAT FIELDS=(?,F1:1,22,F2:1,22)

OPTION COPY

OUTFIL FNAMES=MATCH,INCLUDE=(1,1,CH,EQ,C'B'),BUILD=(1:2,22,23:562X)

OUTFIL FNAMES=UNMATCH1,INCLUDE=(1,1,CH,EQ,C'1'),BUILD=(1:2,22,23:562X)

OUTFIL FNAMES=UNMATCH2,INCLUDE=(1,1,CH,EQ,C'2'),

BUILD=(1:24,22,23:562X)

/\*

**Q. How to compare 2 files using File-Aid?**

**ANS.**

Yeah we can compare 2 files using option 10 in fileaid main menu.

**Q. I HAVE A SEQUENTIAL FILE CONTAINING ONE RECORD IN WHICH I HAVE ONE FIELD AS CUSTOMER IDENTITY NUMBER FIELD WHICH IS A SIGNED FIELD. HOW TO SEQUENTIALLY INCREMENT THIS FIELD USING OVERLAY PARAMETER?.**

**ANS.**

Search for **SEQNUM** in SORT.  
You can generate a sequnece as you want.  
You can define the max limit the sequence can reach, where   
the sequnece should start, no. of bytes the sequence should   
use etc ...

**Q. diff bw vsam and normal flat file?**

**ANS.**

One difference is how we process the records.  
In flat file we can process records only sequentially where   
as in Vsam we can process sequentially(ESDS), random(KSDS)   
or dynamic(RRDS).  
That's why most of them prefer vsam. since we can access in   
all modes.

**Q. what is mainframe?**

**ANS.**

Mainframe is a large systems technology, it acts as an application server where huge amount of information is processed on dialy bases.

**Q. what is force complete**

**ANS.**

Just to make it clear ,

If job A triggers job B and job B in turn triggers job C.

Job A -> Job B -> Job C

If A abend for some reason,

Force completing the job A would mean that the job B would

start and the cycle complete.

It is like making the scheduler system believe that the

abended job has completed and you carry on with your schedule.

On the other hand, Cancelling the job A would mean that the

Job B would wait indefinitely for job A to finish which will

never happen.

**Q. If i am going to change some variable in a copybook( size or**

**variable type) ,what are the changes that need to be done in**

**the corresponding JCL.**

**ANS.**

No changes in the JCL.

The only change would be to make sure the program is   
compiled and link-edited, so as to get the changes   
reflected in the load module you specify in the JCL.

**Q. Hi, all**

**suppose i have 5 steps (S1,S2,S3,S4,S5) what will happen if**

**cond is true or false (which of the other steps get executed)?**

**1) //s3 exec pgm=abc,cond=(0,le)**

**2) //s3 exec pgm=abc,cond=(0,le,step2)**

**3) In the jobcord RESTART=step3,cond=(0,le)**

**4) can i code COND=TRUE in jobcard, if yes what will happen?**

**ANS.**

Let me clear you on what is cond and rstart:  
  
Cond: say if you have coded a cond stmt for a step. If the   
condition is met then it won't execute. If the condition is   
false it will execute the step.  
  
Restart: is used to restart the job from a particular step.   
When you are restarting a job from step3 say. Then whatever   
the cond parm on step3 it will ignore and it restarts from   
step3.  
  
Let me answer the points now.  
  
1) //s3 exec pgm=abc,cond=(0,le)  
<ANS> If you code cond=(0,le) then this condition will   
check for all previous steps for cond code since 0 is   
always less than or equal to return code from previous   
steps it will bypass the step S3  
2) //s3 exec pgm=abc,cond=(0,le,step2)  
<ANS> Similar as answer 1, But here it will look only for   
Return code from step step2 only. Even in this case it will   
skip the step s3  
3) In the jobcord RESTART=step3,cond=(0,le)  
<ANS> This will run only step step3 in the job. Coding a   
cond in job is like applying it to all steps..  
4) can i code COND=TRUE in jobcard, if yes what will happen?  
<ANS> We can code only cond as EVEN or ONly or in the   
format as (condition,RO,Stepname)  
where condition = 0 - 4096  
RO = LE, LT, GT, GE, EQ, NE  
stepname - step name of the job to look for return code.

**Q. How to send data from cobol program to jcl?**

**ANS.**

We can set the RETURN-CODE in COBOL which is passed to JCL

**Q. What is the exact difference between PRTY and DPRTY**

**ANS.**

PRTY to used to give the priority to the job, and should be   
coded in the jobcard  
  
DPRTY is used to to give the priority to the steps in the   
job, and should be coded in the exec statement( step card)

Q. I have two files each contains 10 records. I would like to

copy both files into one output file but in alternate

sequence. for e.g. first record from file1 then record 2

from file2.....

ANS.

it will be processed in 3steps

if the data is AAA

AAA

BBB

CCC

FILE2

DDD

EEE

FFF

LIKE 10 RECS

step1:

srt fields=copy

outrec fields=(1:1,3,4:seqnum,4,ZD,START=1,INCR=2 )

STEP:2

step2:

srt fields=copy

outrec fields=(1:1,3,4:seqnum,4,ZD,START=2,INCR=2 )

STEP=3 SORT FIELDS = COPY

OUTREC FIELDS =(1:1,3)

//SORTTEMP JOB AF-1055,'ALTERNATE WRITE',

// MSGCLASS=X,MSGLEVEL=(1,1),

// CLASS=P,NOTIFY=&SYSUID

//\*ALTERNATE WRITE

//SORT001 EXEC PGM=SORT

//SYSOUT DD SYSOUT=\*

//SYSPRINT DD SYSOUT=\*

//SORTIN DD DSN=SDAF.NANI.P732083.INPUT.SE,DISP=SHR

//SORTOUT DD DSN=&&TEMP1,DISP=(NEW,PASS)

//SYSIN DD \*

SORT FIELDS=COPY

OUTFIL BUILD=(1,22,23:SEQNUM,04,ZD,START=1,INCR=2)

/\*

//SORT002 EXEC PGM=SORT

//SYSOUT DD SYSOUT=\*

//SYSPRINT DD SYSOUT=\*

//SORTIN DD DSN=SDAF.NANI.P732083.MOTHIN.SE,DISP=SHR

//SORTOUT DD DSN=&&TEMP2,DISP=(NEW,PASS)

//SYSIN DD \*

SORT FIELDS=COPY

OUTFIL BUILD=(1,22,23:SEQNUM,04,ZD,START=2,INCR=2)

/\*

//\*DD NAMES FROM OTHER STEPS

//SORT003 EXEC PGM=SORT

//SYSOUT DD SYSOUT=\*

//SYSPRINT DD SYSOUT=\*

//SORTIN DD DSN=&&TEMP1,DISP=SHR

// DD DSN=&&TEMP2,DISP=SHR

//SORTOUT DD DSN=SDAF.NANI.OUT.SE,DISP=OLD

//recl of sorout=40

//SYSIN DD \*

SORT FIELDS=(23,4,ZD,A)

OUTFIL BUILD=(1,22,23:18X)

/\*

**Q. How to pass values in jcl to cobol?**

**ANS**

We can pass data from JCL to Cobol in 3 ways.  
1. SYSIN: Normally and using files  
2. Parm Parameter in Exec stmt  
1. Sysin: Using this we can pass large amount of data. The   
data passed using sysin will be accepted in cobol using   
accept statement in procedure division.   
  
//sysin dd \*  
adbcde  
/\*   
  
or   
  
//sysind dd dsn=<filename>,disp=shr  
  
2. Parm: The parm parameter in Exec is used to send 100   
char's of data from jcl step to cobol. This is accepted in   
cobol usign linkage section. LInkage section should be   
coded with Lenght and data fields.  
  
//Stepname exec pgm=<PGManme>,parm='100 chars max'

**Q. How to identify in JCL that an input file is empty without reading it?**

**ANS.**

Use IDCAMS to check

//IDCAMEMP JOB AF-1055,'EMPTY CHECK',

// MSGCLASS=X,MSGLEVEL=(1,1),

// CLASS=P,

// NOTIFY=&SYSUID

//\*DELETES THE MEMBER EVEN IF PDS IS OPENED

//DEL0001 EXEC PGM=IDCAMS

//SYSOUT DD SYSOUT=\*

//SYSPRINT DD SYSOUT=\*

//DD1 DD DSN=SDAF.NANI.OUT.SE,DISP=SHR

//SYSIN DD \*

PRINT INFILE(DD1) CHARACTER COUNT(1)

/\*

if return code is 0, file is not empty   
if return code is 4, file is empty

**Q. How to copy one PS file to multiple PS files with same data?**

**ANS**

//ICECOPY1 JOB AF-1055,'ICETOOL CPY',

// MSGCLASS=X,MSGLEVEL=(1,1),

// CLASS=P,NOTIFY=&SYSUID

//\*

//ICE001 EXEC PGM=ICETOOL

//DFSMSG DD SYSOUT=\*

//TOOLMSG DD SYSOUT=\*

//SYSOUT DD SYSOUT=\*

//SYSPRINT DD SYSOUT=\*

//IN1 DD DSN=SDAF.NANI.P732083.INPUT.SE,

// DISP=SHR

//OUT1 DD DSN=SDAF.NANI.OUT.SE,

// DISP=OLD

//OUT2 DD DSN=SDAF.NANI.OUT2.SE,

// DISP=OLD

//TOOLIN DD \*

COPY FROM(IN1) TO(OUT1,OUT2)

/\*

**Q. What is catelog procedure and how many catelog procedure to**

**use in one job?**

**ANS.**

Procedure: set of JCL code used to perform specified

function

2 types

1. Instream and 2. Catalog proc

Instream proc: is the one which is coded with in the JCL

Catlg Prod: Which is coded in a member of a PDS and is

referenced in the JCl through the JCLLIB order stmt.

We can use max of 255 steps in a JCL. Each step can have

only 1 catlg proc. Hence 255 catlg proc can be used in a

JCL.

**Q. Suppose there are 10 steps in a PROC, I want to execute**

**only step5. How do you give the condition in the JCL that**

**calls this PROC?**

**ANS.**

//SYSIN DD \*

**EDIT TYPE=INCLUDE,STEPNAME=(STEP5)**

/\*

**Q. can any one plzzzzzz tell the jcl code for creating ps**

**using idcams**

**ANS.**

//STEP EXEC PGM=**IEFBR14**

//DD1 DD DSN=KK.PS.FILE,DISP=(,CATLG,DELETE),

// SPACE=(TRK,(10,2),RLSE),

// DCB=(LRECL=80,BLKSIZE=800,RECFM=FB),

//SYSPRINT DD SYSOUT=\*

//SYSIN DD DUMMY

OR

//STEP EXEC PGM=**IDCAMS**

//DD1 DD DSN=KK.PS.FILE,DISP=(,CATLG,DELETE),

// SPACE=(TRK,(10,2),RLSE),

// DCB=(LRECL=80,BLKSIZE=800,RECFM=FB),

//SYSPRINT DD SYSOUT=\*

//SYSIN DD DUMMY

**Q. What is the meaning of the following declaration : DCB=BLKSIZE=,**

**What is the difference between above declaration & not**

**specifying DCB at all for a output file?**

**ANS.**

it specifies the block size. If not specified, system will

automatically assign the block size for the data

**Q. hi in one of the interview one asked me how to submit a job**

**from cobol?as well as how to submit a jcl from CICS? can u**

**pls any one tell me..**

**ANS.**

**Q. What does the one advantange of using IEBUPDTE?**

**ANS.**

By using the IEBUPDTE we can change our organization type

of the dataset....

(i.e.) We can convert our PS file to PDS, PDS to PDSE or

reverse also. Its true.

t updates ibm source libraries such as the catalogued procedures libraries.

Q. I have DATE filed like DD-MM-YYYY, So I want output should be

MM/DD/YYYY using JCL?

Can anybody post the answer for above requirement?

ANS.

//SYSIN DD \*

OPTION COPY

OUTFILE FNAMES=SORTOUT

OUTREC=(4,2,C'/',1,2,C'/',7,4)

/\*

**Q. How can we increment subscript and index?**

**ANS.**

SUBCRIPT:

CAN BE INCREMENT OR DECREMENT USING ARITHMETIC OPERATIONS

INDEX:

CAN BE INCREMENT OR DECREMENT USING SET VERB

**Q. We have an output dataset in job with disp parameter as SHR.**

**Can we write data in that file dataset?**

**ANS.**

YES

**Q. How to view the hexa decimal value thru file aid if copy**

**book is not present for that particular data**

**ANS**

Type HEX ON to the command prompt

**Q. a input file contains 1000 records, how to move the first**

**500 record into one out put file and how to move to second**

**500 records to anothere output file**

**ANS.**

THIS IS FOR COPYING FIRST 500 RECORDS

using IDCAMS utility

//sysin DD\*

**REPRO** -

INFILE(DD1) -

OUTFILE(DD2) -

**COUNT**(500) -

SKIP(500)

/\*

THIS IS FOR COPY next 500 RECORDS

using IDCAMS utility

//sysin DD\*

REPRO -

INFILE(DD1) -

OUTFILE(DD2) -

skip(500) -

COUNT(500)

/\*

**Q. In My job I have 15 procs.and in each proc i have 3 steps.**

**i want to execute 3 step in proc 10.is it possible?**

**if possible how?**

**ANS.**

yes u can run the 3rd step of 10th proc by coding

**restart=procstepname.stepname**

procstepname is the step name where the 10th proc is used

and stepname is 3.

**Restart=proc10.step3**