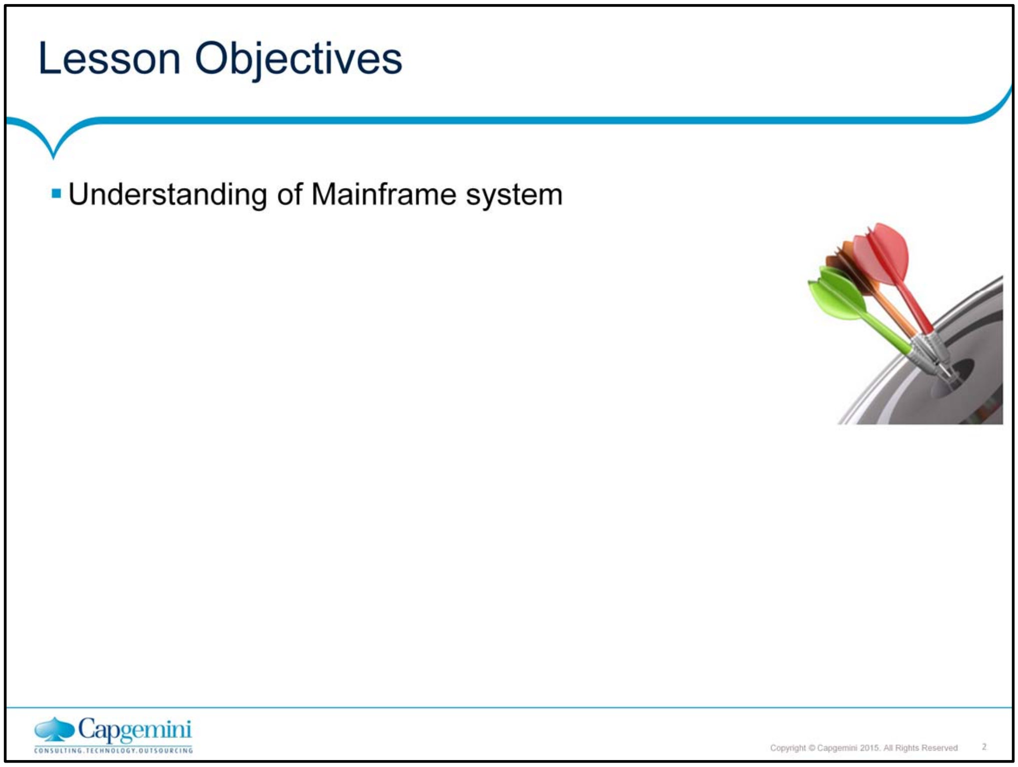
# Familiarization to MF



## Lesson Objectives

- Understanding of Mainframe system

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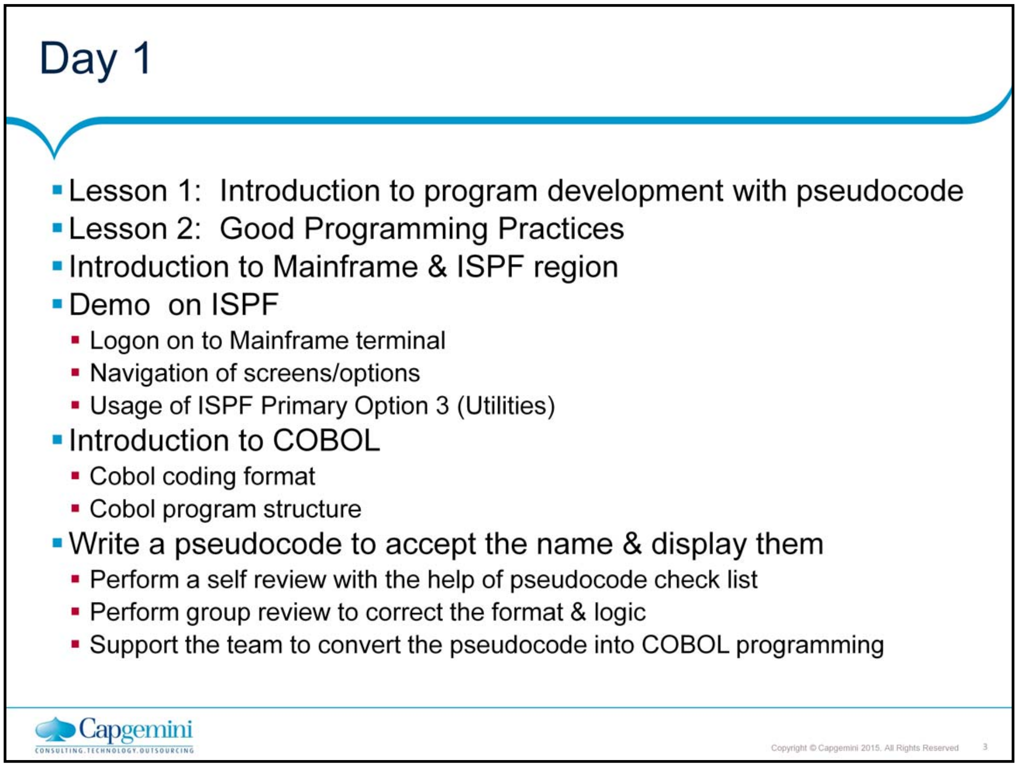

## Day 1

- Lesson 1: Introduction to program development with pseudocode
- Lesson 2: Good Programming Practices
- Introduction to Mainframe & ISPF region
- Demo on ISPF
  - Logon on to Mainframe terminal
  - Navigation of screens/options
  - Usage of ISPF Primary Option 3 (Utilities)
- Introduction to COBOL
  - Cobol coding format
  - Cobol program structure
- Write a pseudocode to accept the name & display them
  - Perform a self review with the help of pseudocode check list
  - Perform group review to correct the format & logic
  - Support the team to convert the pseudocode into COBOL programming

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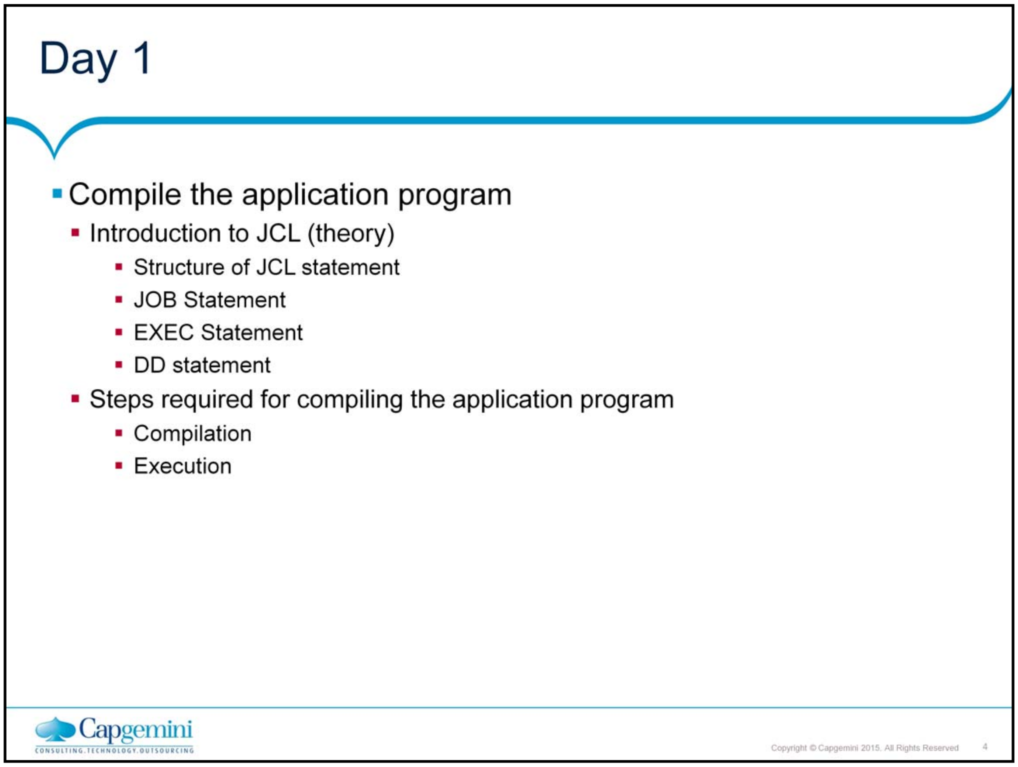
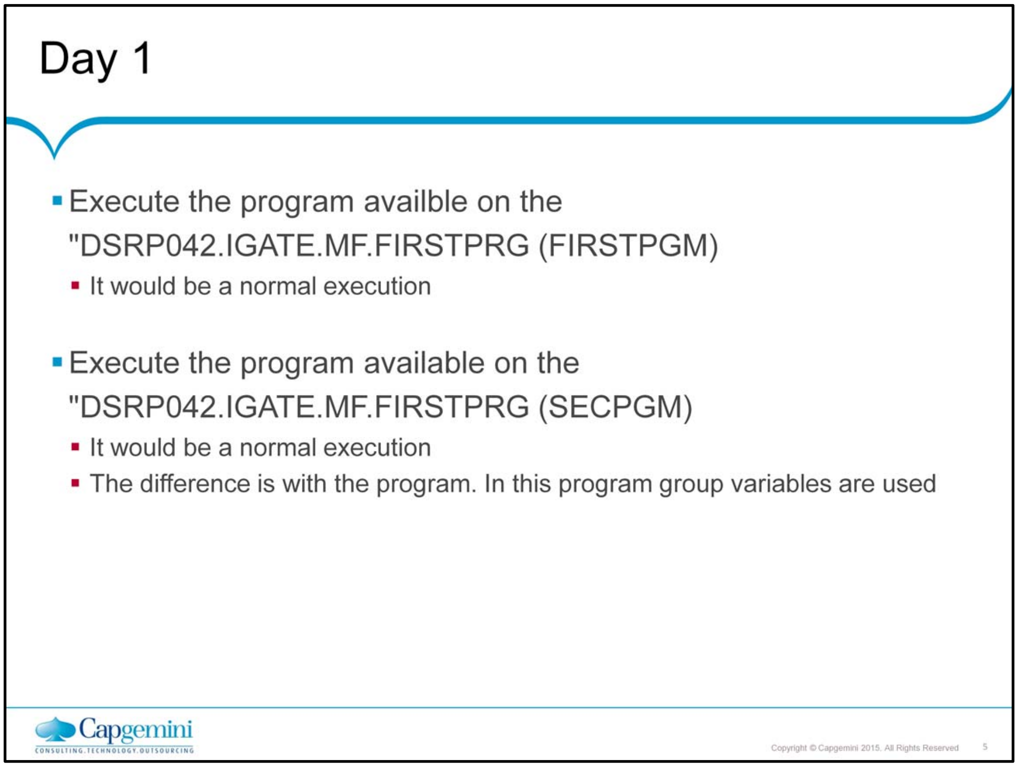


## Day 1

- Compile the application program
  - Introduction to JCL (theory)
    - Structure of JCL statement
    - JOB Statement
    - EXEC Statement
    - DD statement
  - Steps required for compiling the application program
    - Compilation
    - Execution



## Day 1

- Execute the program availble on the "DSRP042.IGATE.MF.FIRSTPRG (FIRSTPGM)
  - It would be a normal execution
- Execute the program available on the "DSRP042.IGATE.MF.FIRSTPRG (SECPGM)
  - It would be a normal execution
  - The difference is with the program. In this program group variables are used

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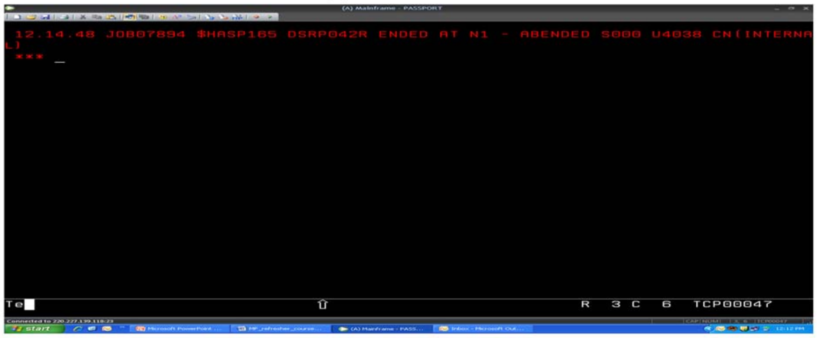
## Day 1

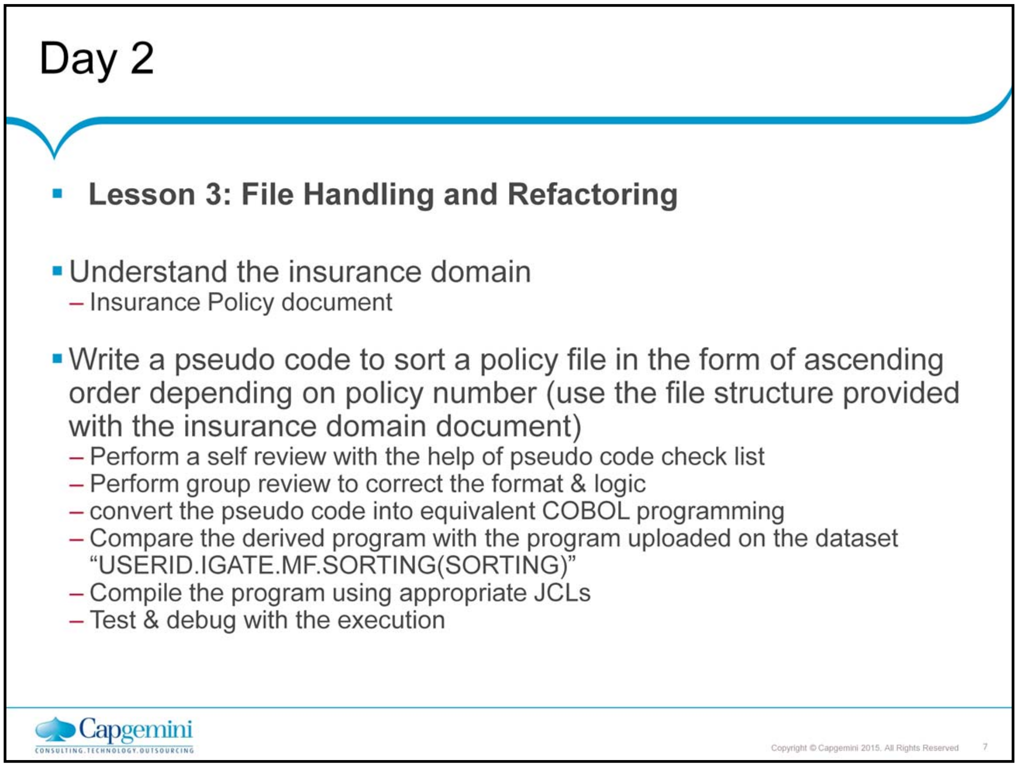
- Execute the program available on the "DSRP042.IGATE.MF.FIRSTPRG (THIRDPGM)
  - At the time of compilation it would throw an compilation error of **MAXCC = 8.** Debug this error & proceed for Execution.
  - At the time of  execution it would throw an abend.
    - Discuss with abends & their types



```
 12.14.48 JOB07894 $HASP165 DSRP042R ENDED AT N1 - ABENDED S000 U4038 CN(INTERNA
L)
 ***
```

```
Te                                 ⇧                        R   3 C   6   TCP00047
```

6

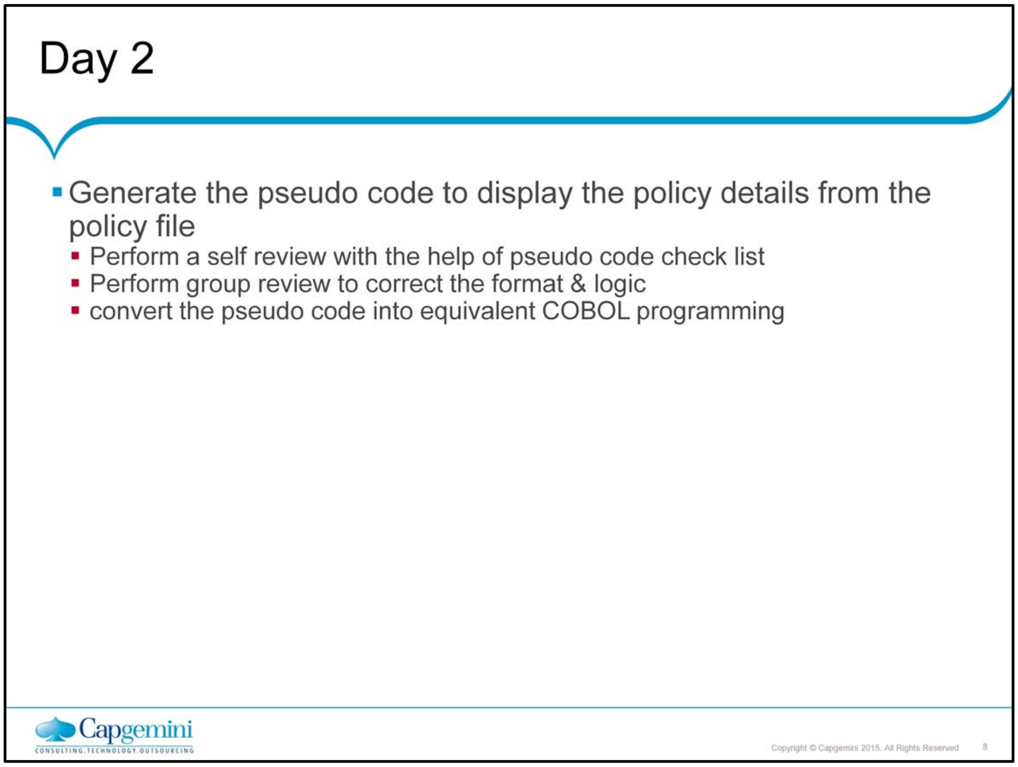


## Day 2

- **Lesson 3: File Handling and Refactoring**

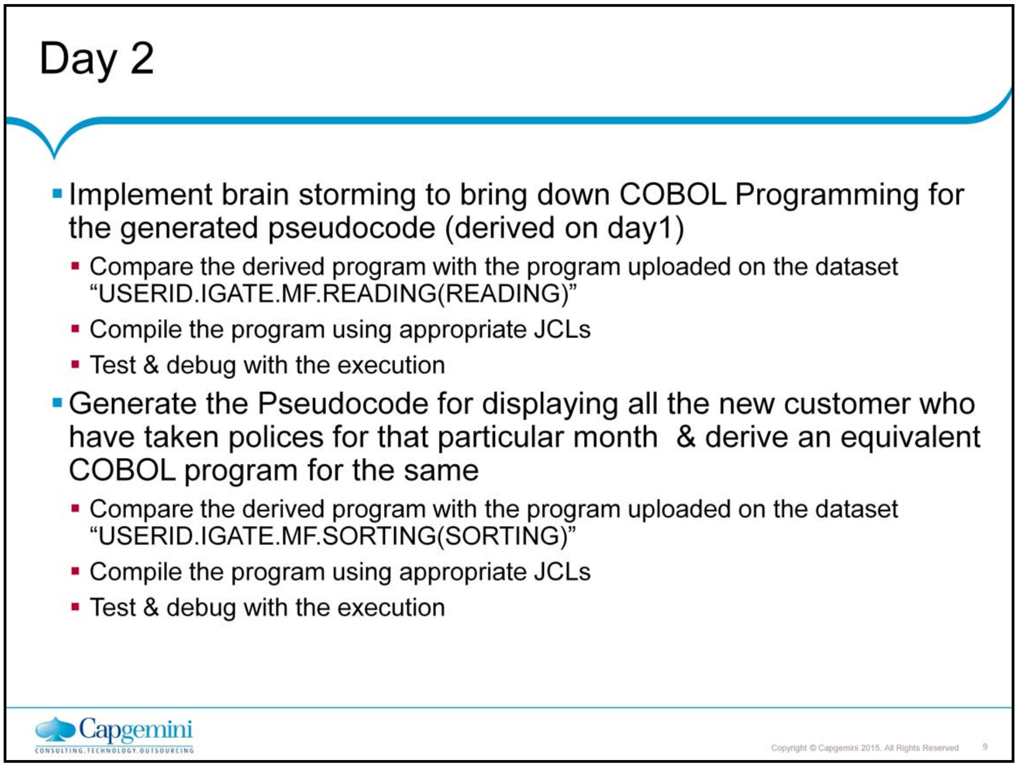
- Understand the insurance domain
  - Insurance Policy document

- Write a pseudo code to sort a policy file in the form of ascending order depending on policy number (use the file structure provided with the insurance domain document)
  - Perform a self review with the help of pseudo code check list
  - Perform group review to correct the format & logic
  - convert the pseudo code into equivalent COBOL programming
  - Compare the derived program with the program uploaded on the dataset “USERID.IGATE.MF.SORTING(SORTING)”
  - Compile the program using appropriate JCLs
  - Test & debug with the execution



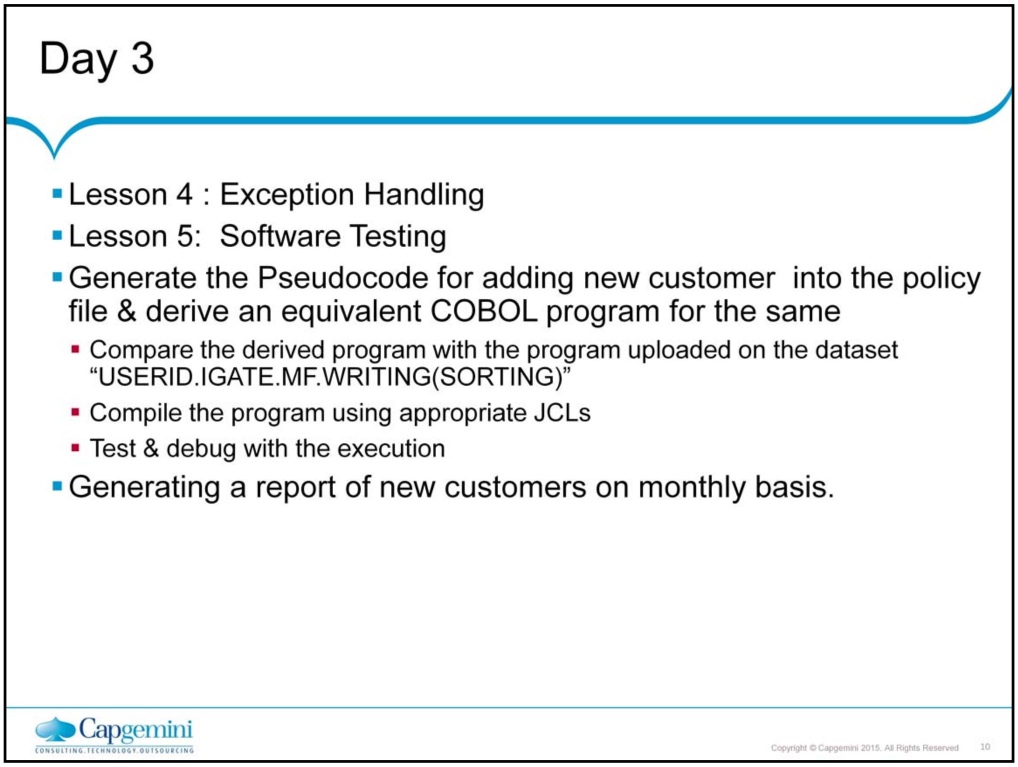
## Day 2

- Generate the pseudo code to display the policy details from the policy file
  - Perform a self review with the help of pseudo code check list
  - Perform group review to correct the format & logic
  - convert the pseudo code into equivalent COBOL programming



## Day 2

- Implement brain storming to bring down COBOL Programming for the generated pseudocode (derived on day1)
  - Compare the derived program with the program uploaded on the dataset “USERID.IGATE.MF.READING(READING)”
  - Compile the program using appropriate JCLs
  - Test & debug with the execution
- Generate the Pseudocode for displaying all the new customer who have taken polices for that particular month  & derive an equivalent COBOL program for the same
  - Compare the derived program with the program uploaded on the dataset “USERID.IGATE.MF.SORTING(SORTING)”
  - Compile the program using appropriate JCLs
  - Test & debug with the execution



## Day 3

- Lesson 4 : Exception Handling
- Lesson 5:  Software Testing
- Generate the Pseudocode for adding new customer  into the policy file & derive an equivalent COBOL program for the same
  - Compare the derived program with the program uploaded on the dataset “USERID.IGATE.MF.WRITING(SORTING)”
  - Compile the program using appropriate JCLs
  - Test & debug with the execution
- Generating a report of new customers on monthly basis.

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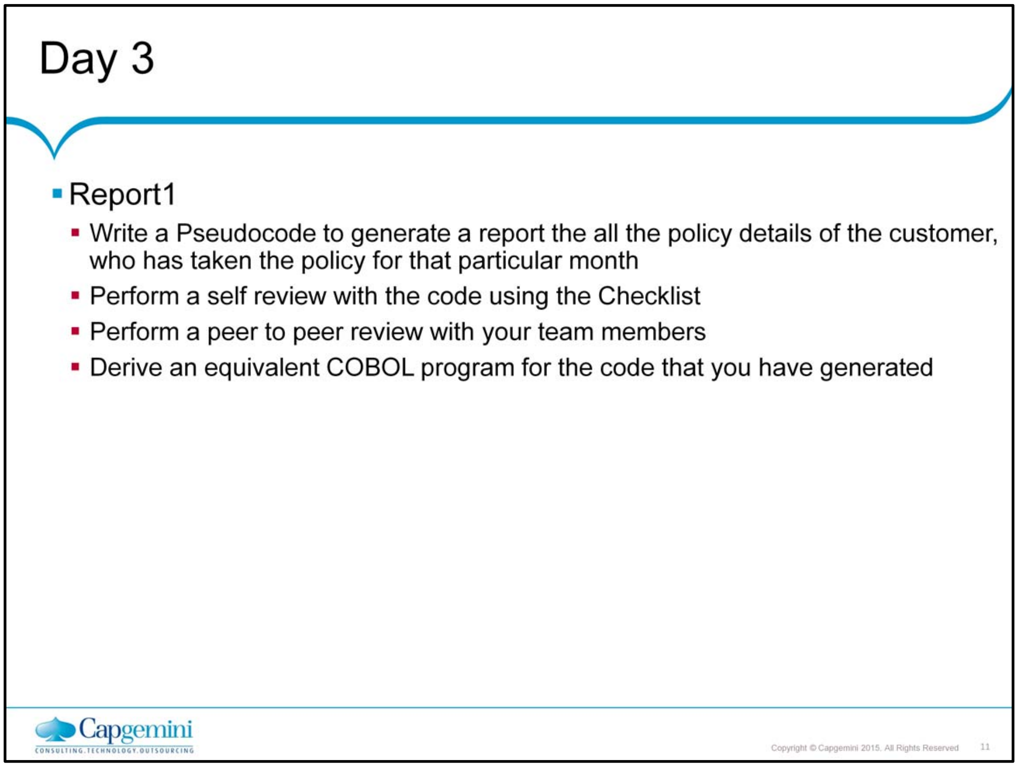
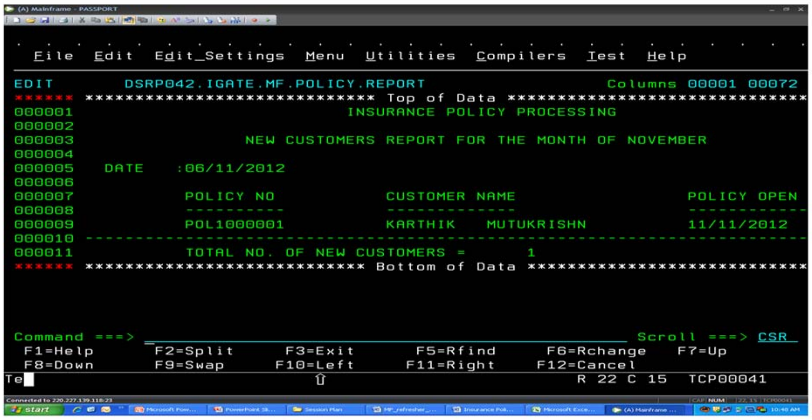


## Day 3

- Report1
  - Write a Pseudocode to generate a report the all the policy details of the customer, who has taken the policy for that particular month
  - Perform a self review with the code using the Checklist
  - Perform a peer to peer review with your team members
  - Derive an equivalent COBOL program for the code that you have generated

# Day 4 : Normal execution

- Compare the derived program with the program available on "USERID.IGATE.MF.POLICY.MF.PGMS(NEWPOL)"
- Compile & execute them



```
  File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
EDIT       DSRP042.IGATE.MF.POLICY.REPORT                 Columns 00001 00072
****** ***************************** Top of Data ******************************
000001                                INSURANCE POLICY PROCESSING
000002
000003                      NEW CUSTOMERS REPORT FOR THE MONTH OF NOVEMBER
000004
000005   DATE    :06/11/2012
000006
000007            POLICY NO            CUSTOMER NAME                POLICY OPEN
000008            ----------           -------------                -----------
000009            POL1000001           KARTHIK   MUTUKRISHN         11/11/2012
000010 -----------------------------------------------------------------------
000011            TOTAL NO. OF NEW CUSTOMERS =      1
****** **************************** Bottom of Data ****************************



Command ===> ________________________________________________ Scroll ===> CSR
 F1=Help       F2=Split      F3=Exit       F5=Rfind      F6=Rchange    F7=Up
 F8=Down       F9=Swap      F10=Left      F11=Right     F12=Cancel
Te                                                       R 22 C 15   TCP00041
```

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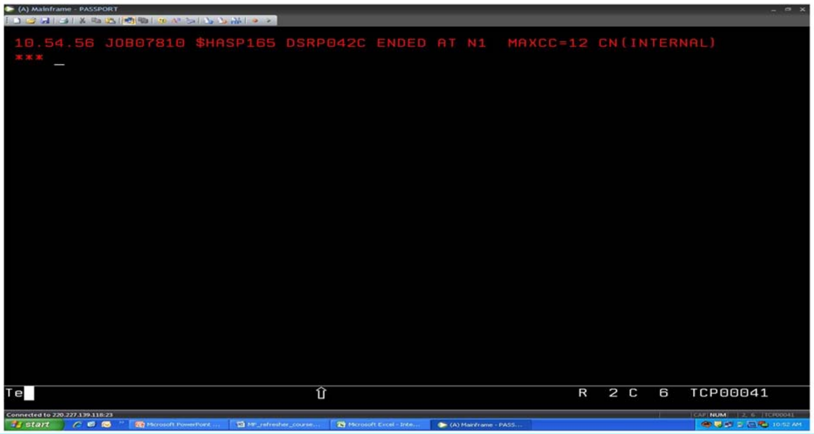
# Day 4 : Compilation error

- Compile & execute the program available in "USERID.IGATE.MF.POLICY.PGMS.ERROR(NEWPOL)"
- Check for error during compilation



```
10.54.56 JOB07810 $HASP165 DSRP042C ENDED AT N1  MAXCC=12 CN(INTERNAL)
***  _
```

```
Te                        ⇧                        R  2 C  6  TCP00041
```

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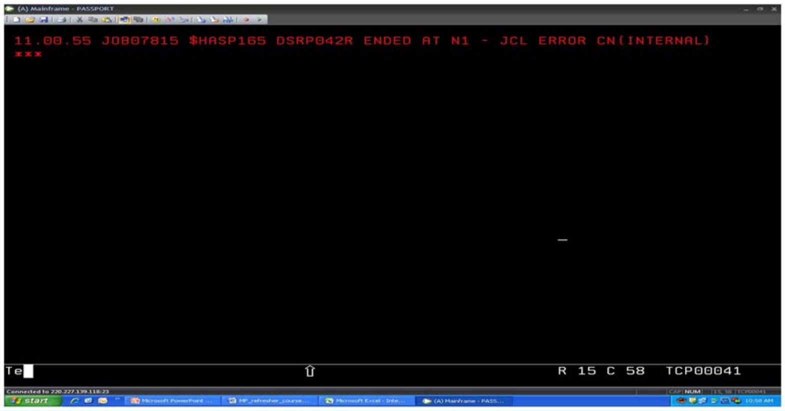
## Day 4 – Execution error

- Compile & execute the program available in “USERID.IGATE.MF.POLICY.PGMS. FILEERR(NEWPOL)”
- When compiled, it would be normal a compilation
- During execution, it would throw an error



```
 11.00.55 JOB07815 $HASP165 DSRP042R ENDED AT N1 - JCL ERROR CN(INTERNAL)
 ***
```

```
Te                          R 15 C 58   TCP00041
```

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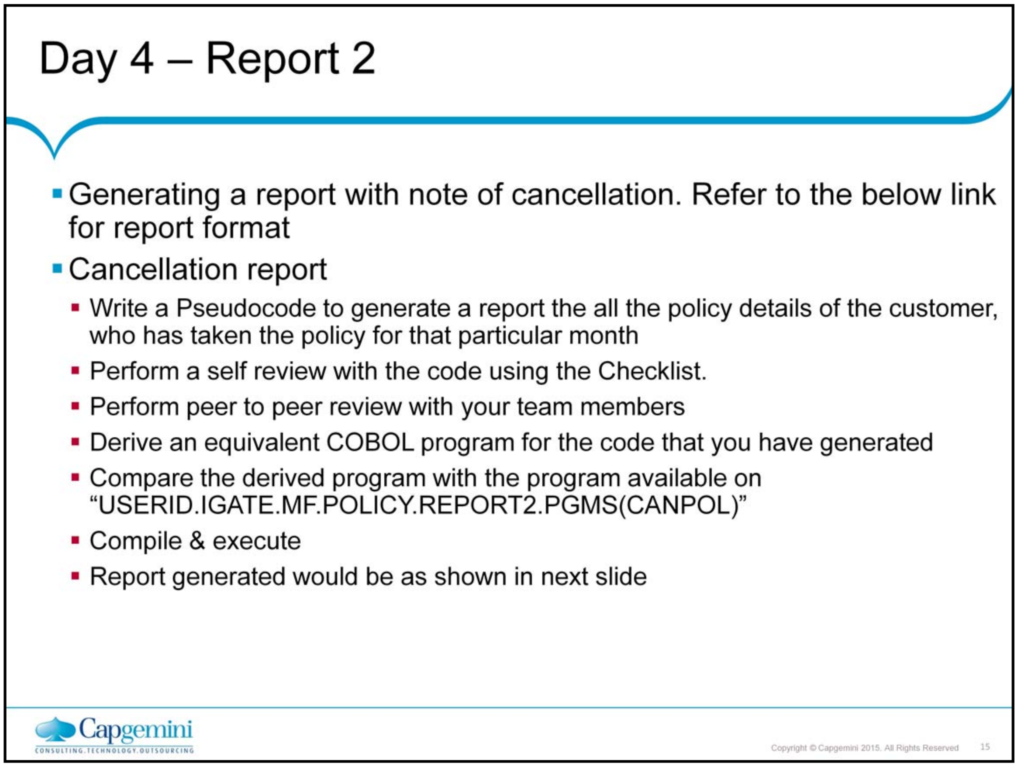
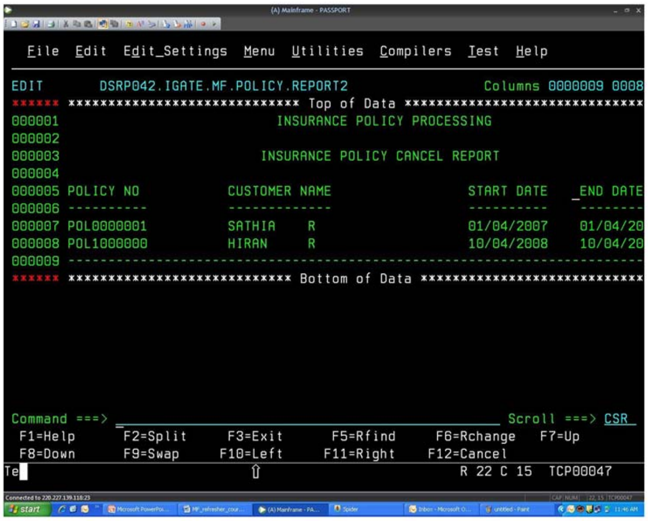


## Day 4 – Report 2

- Generating a report with note of cancellation. Refer to the below link for report format
- Cancellation report
  - Write a Pseudocode to generate a report the all the policy details of the customer, who has taken the policy for that particular month
  - Perform a self review with the code using the Checklist.
  - Perform peer to peer review with your team members
  - Derive an equivalent COBOL program for the code that you have generated
  - Compare the derived program with the program available on "USERID.IGATE.MF.POLICY.REPORT2.PGMS(CANPOL)"
  - Compile & execute
  - Report generated would be as shown in next slide

# Day 4– Report 2



```
  File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
 ------------------------------------------------------------------------
EDIT       DSRP042.IGATE.MF.POLICY.REPORT2                 Columns 0000009 0008
****** ***************************** Top of Data ******************************
000001                                 INSURANCE POLICY PROCESSING
000002
000003                               INSURANCE POLICY CANCEL REPORT
000004
000005 POLICY NO           CUSTOMER NAME                START DATE    _END DATE
000006 ----------          -------------                ----------     --------
000007 POL0000001          SATHIA    R                  01/04/2007     01/04/20
000008 POL1000000          HIRAN     R                  10/04/2008     10/04/20
000009 -------------------------------------------------------------------------
****** **************************** Bottom of Data ****************************




Command ===> _______________________________________________ Scroll ===> CSR
 F1=Help      F2=Split     F3=Exit      F5=Rfind     F6=Rchange   F7=Up
 F8=Down      F9=Swap      F10=Left     F11=Right    F12=Cancel
Te                               ⇧                     R 22 C 15   TCP00047
```

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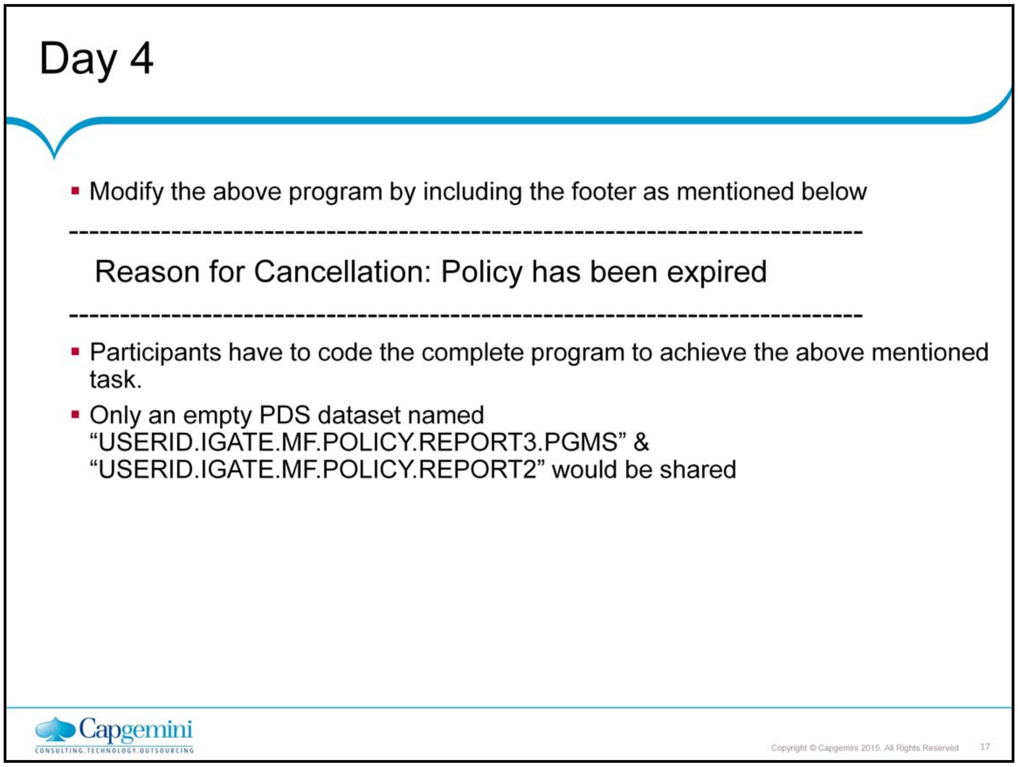

## Day 4

- Modify the above program by including the footer as mentioned below

---------------------------------------------------------------------------

Reason for Cancellation: Policy has been expired

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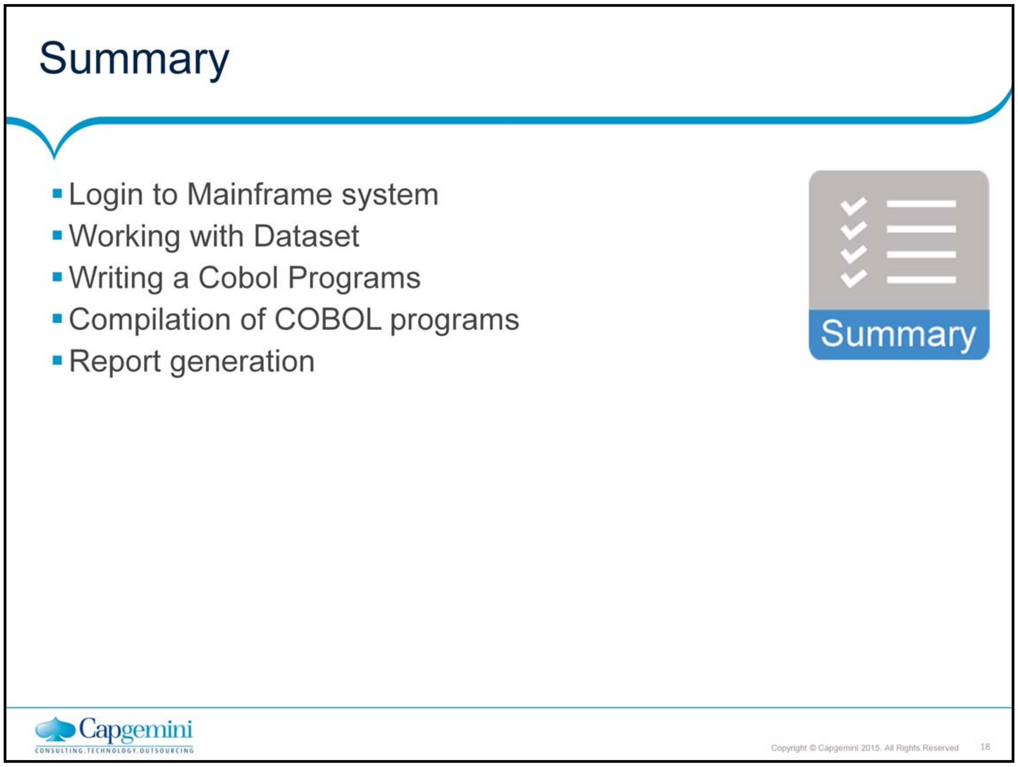
- Participants have to code the complete program to achieve the above mentioned task.
- Only an empty PDS dataset named "USERID.IGATE.MF.POLICY.REPORT3.PGMS" & "USERID.IGATE.MF.POLICY.REPORT2" would be shared



## Summary

- Login to Mainframe system
- Working with Dataset
- Writing a Cobol Programs
- Compilation of COBOL programs
- Report generation

Summary
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