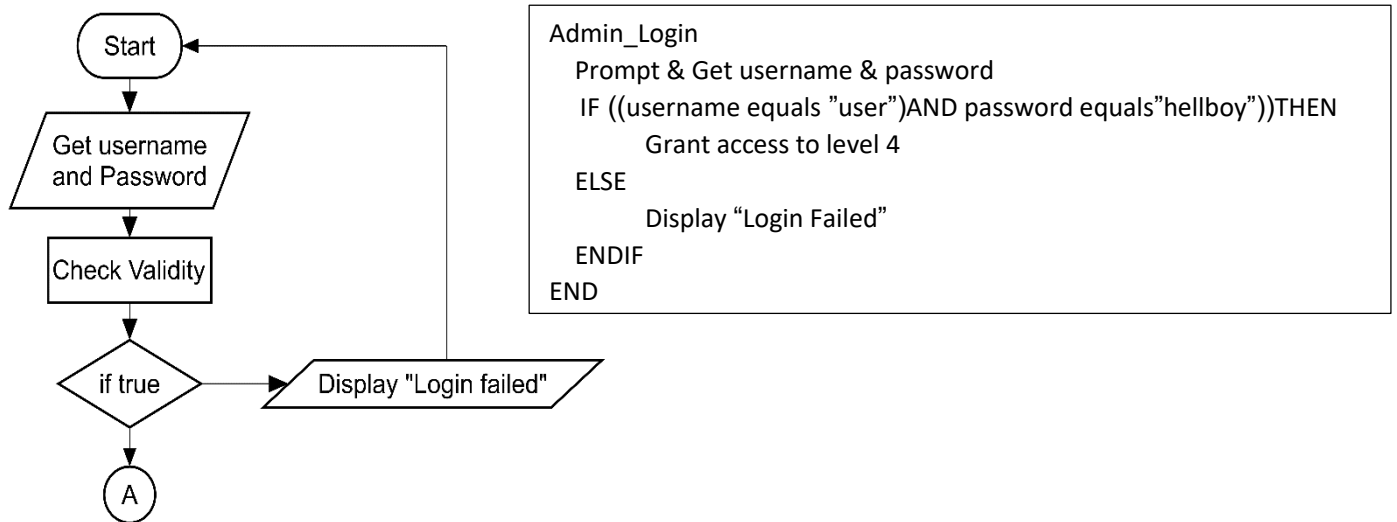
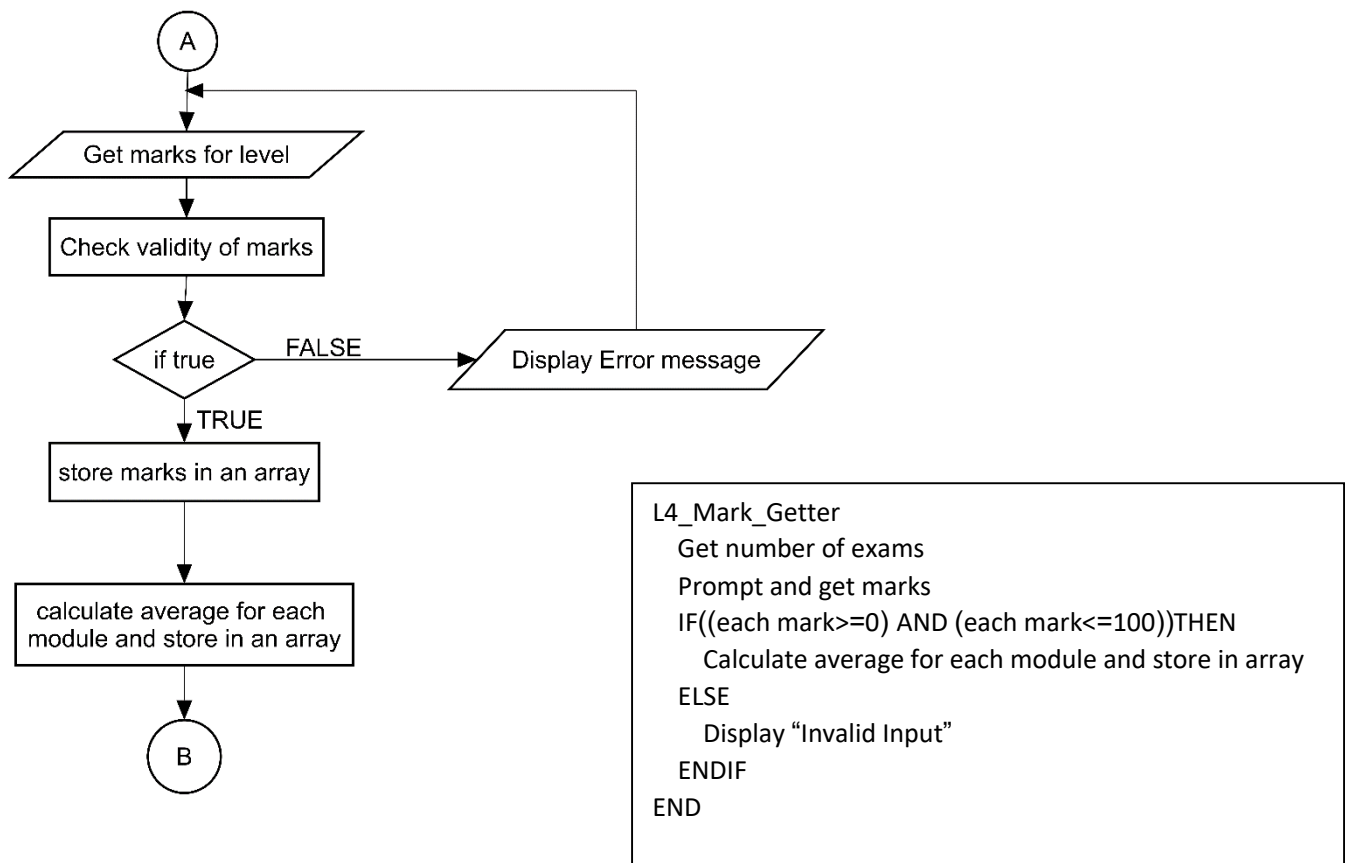


# DESIGN

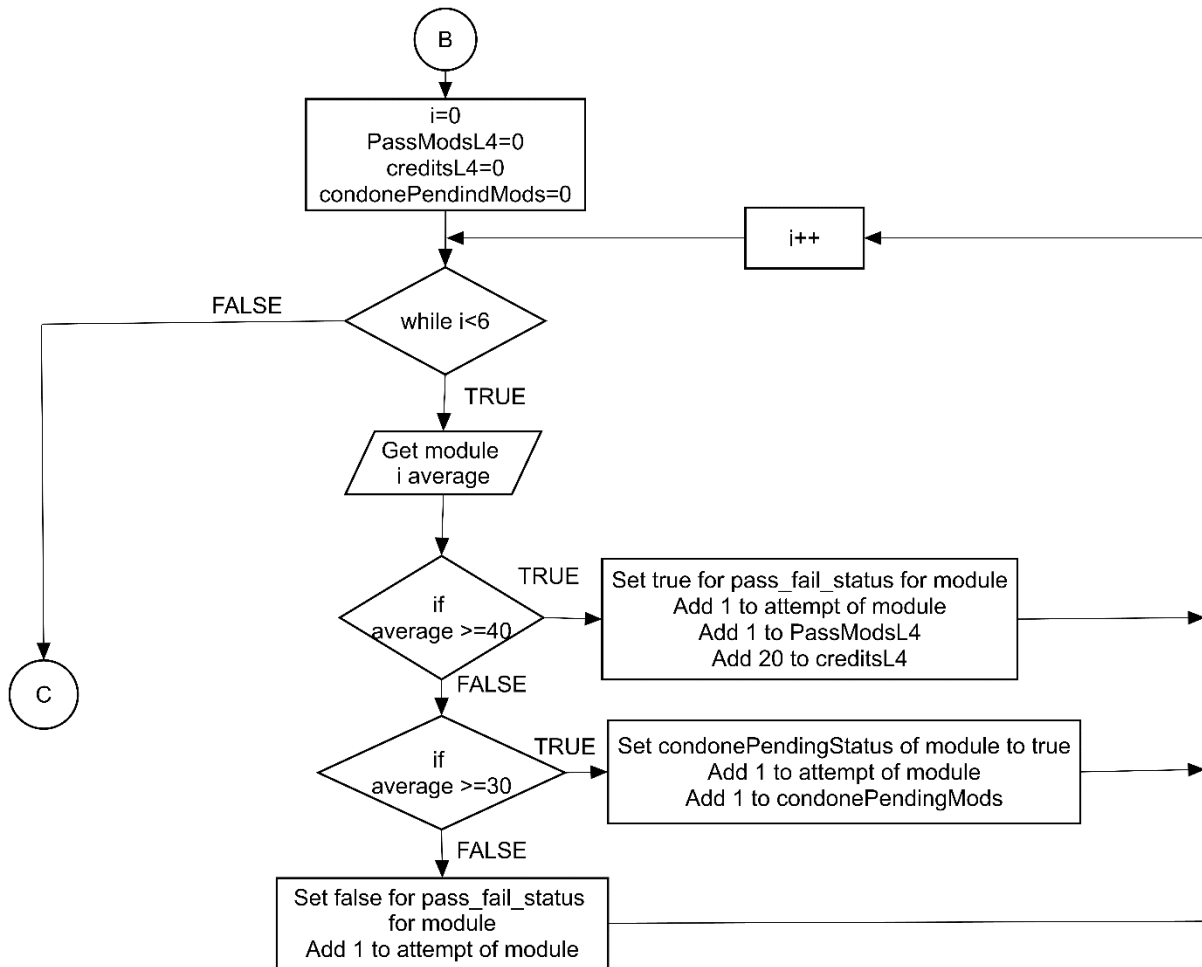
## • Administrator Login (Flowchart 01)



## • Level 4 initial mark getter (Flowchart 02)



- Level 4 initial pass/fail setter (Flowchart 03)

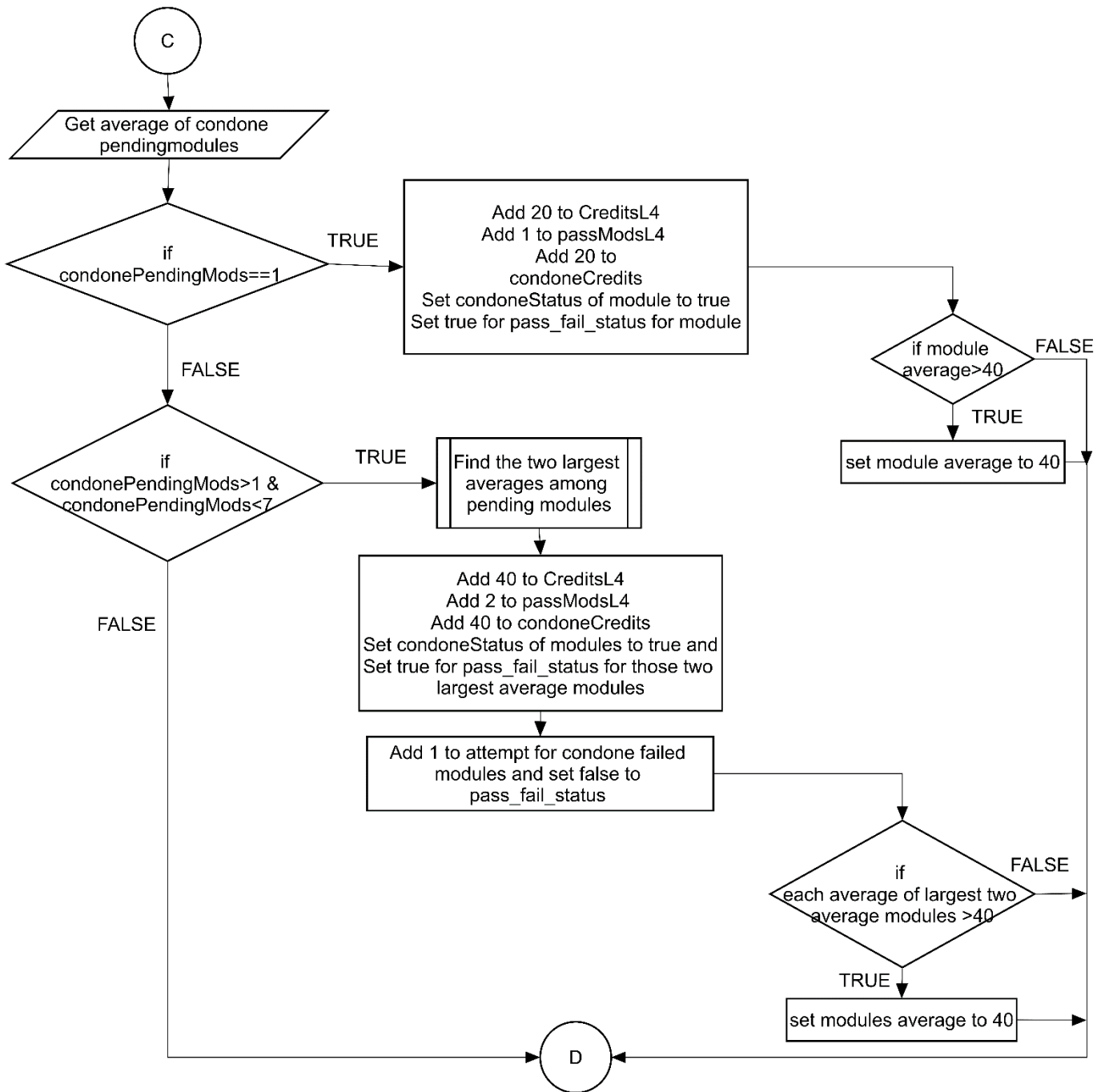


#### Level4\_Initial\_Pass/Fail\_Setter

```

Set i,PassModsL4,creditsL4,condonePendingMods to zero
DOWHILE(i<6)
  Get module[i] average
  IF(average>=40)THEN
    Set true for pass_fail_status of module
    Add 2 to attempt of module
    Add 11 to PassModsL4
    Add 20 to creditsL4
  ELSE
    IF(average>=30)
      Set condonePendingStatus of module to true
      Add 1 to attempt of module
      Add 1 to condonePendingMods
    ELSE
      Set false for pass_fail_status for module
      Add 1 to attempt of module
    ENDIF
  ENDIF
  Add 1 to i
ENDDO
END
  
```

- Level 4 condone setter (Flowchart 04)



#### Level4\_Condone\_Setter

Get condonePendingMods, average of condone pending modules

IF(condonePendingMods equals to one)THEN

    Add 20 to CreditsL4

    Add 1 to passModsL4

    Add 20 to condoneCredits

    Set condoneStatus of module to true

    Set true for pass\_fail\_status for module

    IF(module average>40)THEN

        Set module average to 40

    ELSE

    ENDIF

ELSE

    IF(condonePendingMods>1 AND condonePendingMods<7)THEN

        Find two largest averages among pending modules

        Set condoneStatus of those two modules to true

        Set pass\_fail\_status of those two modules to true

        Add 1 to attempt of condone failed modules

        Set false for pass\_fail\_status of those condone failed modules

        IF(average of two condone passed module>40)THEN

            Set modules average to 40

        ELSE

        ENDIF

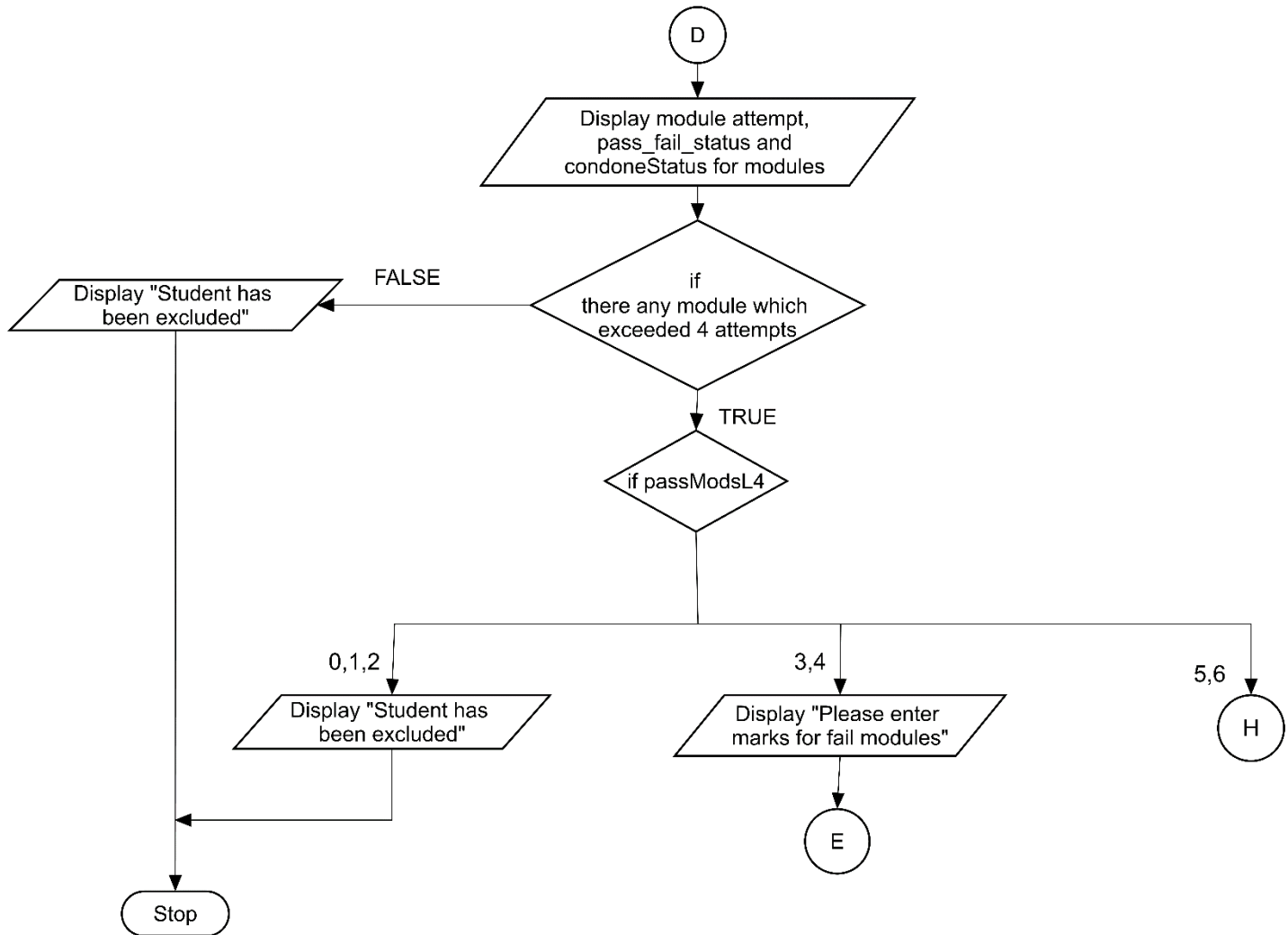
    ELSE

    ENDIF

ENDIF

END

- Level 4 Result Print (Flowchart 05)

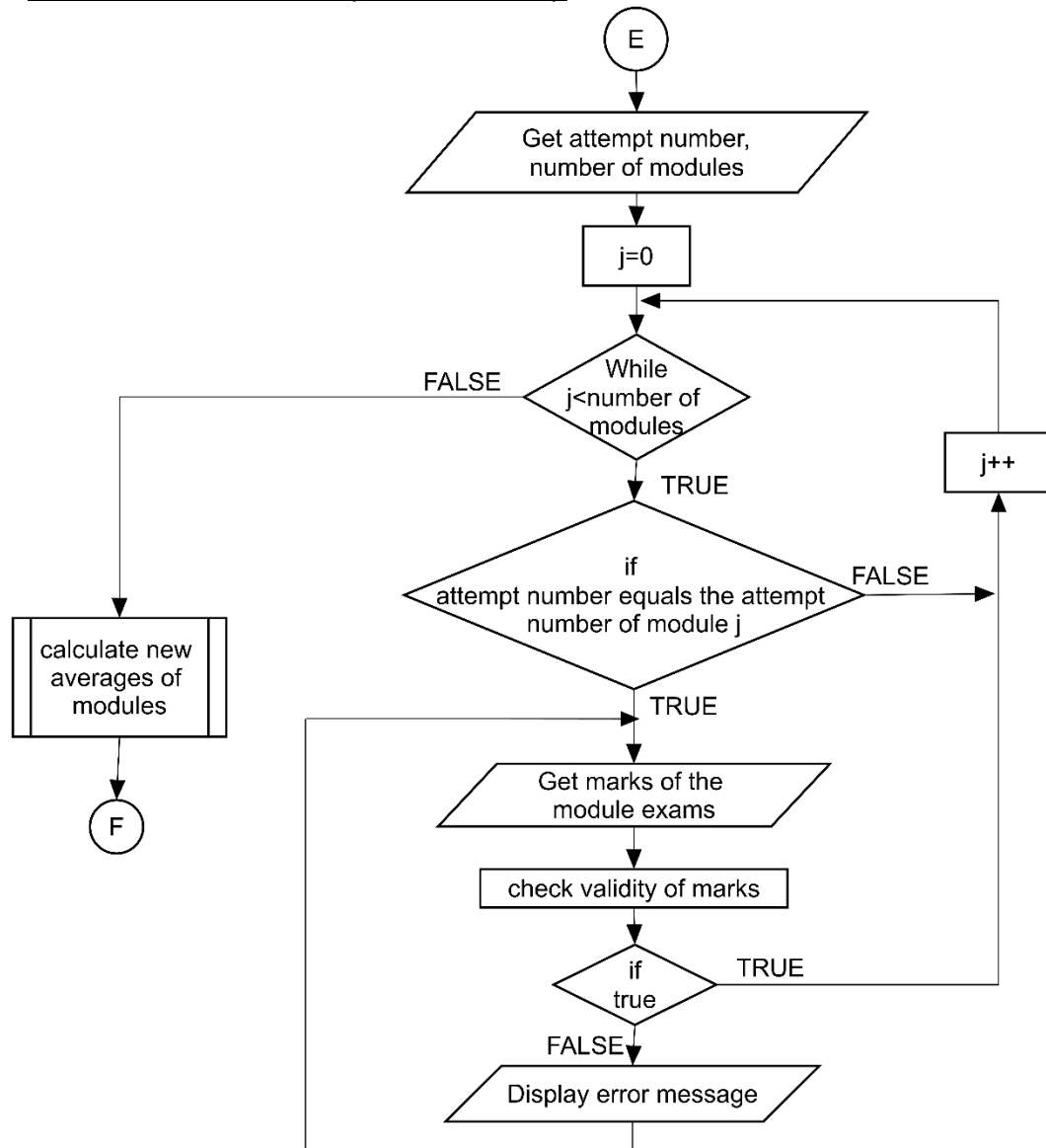


#### Level4\_Result\_Print

```

Display attempt,pass_fail_status and condoneStatus for modules
IF(There any module which exceeded 4 attempts)THEN
  IF((passModsL4 equals 5) OR (passModsL4 equals 6))THEN
    Go to level 5
  ELSE
  ENDIF
  IF((passModsL4 equals 3) OR (passModsL4 equals 4))
    Display "Please enter marks for failed modules"
    Go to Attempt mark getter
  ELSE
  ENDIF
  IF((passModsL4 equals 0) OR (passModsL4 equals 1) OR (passModsL4 equals
2))
    Display "Student has been excluded"
  ENDIF
  ELSE
    Display "Student has been excluded"
  END
END
  
```

- Attempt mark getter (Flowchart 06)



#### Attempt\_Mark\_Getter

Get attempt number,number of modules

Set j to zero

DOWHILE(j<number of modules)

IF(attempt number equals the attempt number of the module[j] )THEN

Get marks of the module exams

IF((each mark>=0) AND (each mark<=100))THEN

Calculate average for each module and store in array

ELSE

Display "Invalid Input"

ENDIF

ENDIF

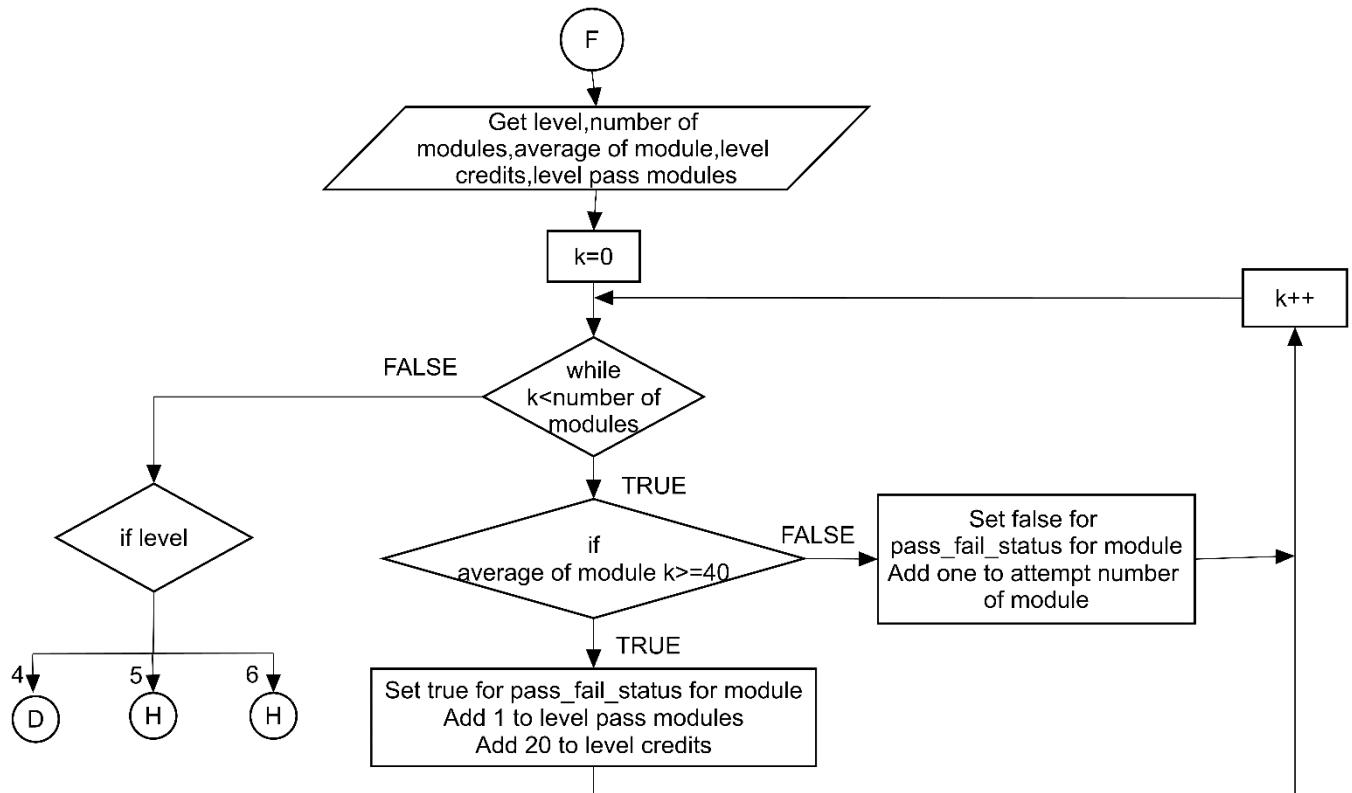
Add one to j

ENDDO

Calculate new average of modules

END

- Attempt pass/fail setter (Flowchart 07)



#### Attempt\_Pass\_Fail\_Setter

Get level,number of modules,level credits,level pass modules

Set k to zero

DOWHILE(K<number of modules)

IF(average of the module[k]>=40)

Set true for pass\_fail\_status for module

Add 1 to level pass module

Add 20 to level credits

ELSE

Set false for pass\_fail\_status for module

Add 1 to attempt number of the module

ENDIF

Add one to k

ENDDO

IF(level equals 4)THEN

Go to level 4 result print

ELSE

ENDIF

IF(level equals 5 OR level equals 6)THEN

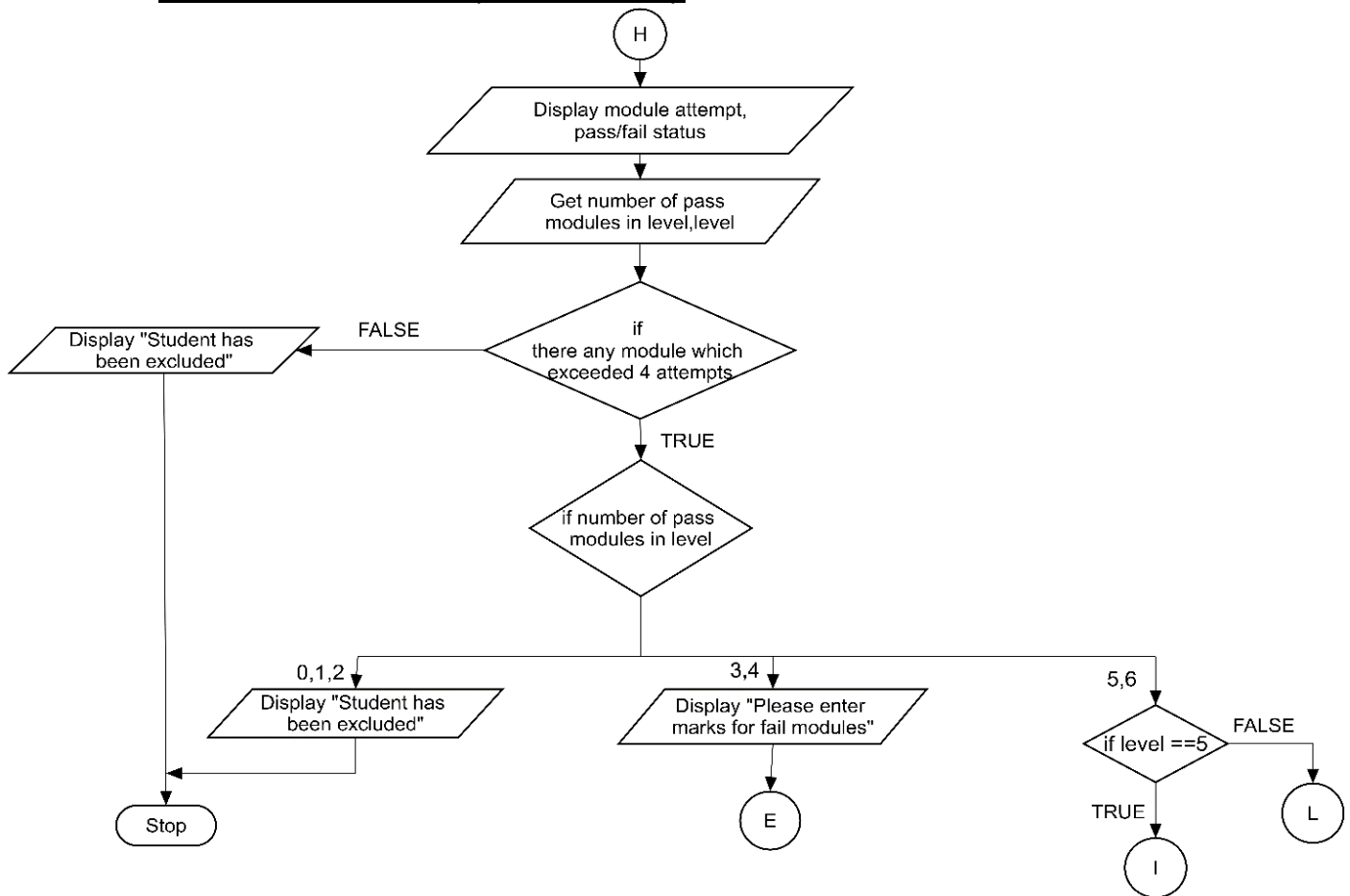
Go to level 5,6 result print

ELSE

ENDIF

END

- Level 5,6 Result Print (Flowchart 08)



#### Level\_5\_6\_Result\_Print

Display module attempt,module pass\_fail\_Status

Get number of pass modules in level and level

IF(There any module which exceeded 4 attempts)THEN

IF((number of pass modules in level equals 5) OR (number of pass modules in level equals 6))THEN

IF(level equals 5)THEN

Go to level 6

ELSE

Go to award calculation

ENDIF

ELSE

ENDIF

IF((passModsl4 equals 3) OR (passModsl4 equals 4))

Display "Please enter marks for failed modules"

Go to Attempt mark getter

ELSE

ENDIF

IF((passModsl4 equals 0) OR (passModsl4 equals 1) OR (passModsl4 equals 2))

Display "Student has been excluded"

ENDIF

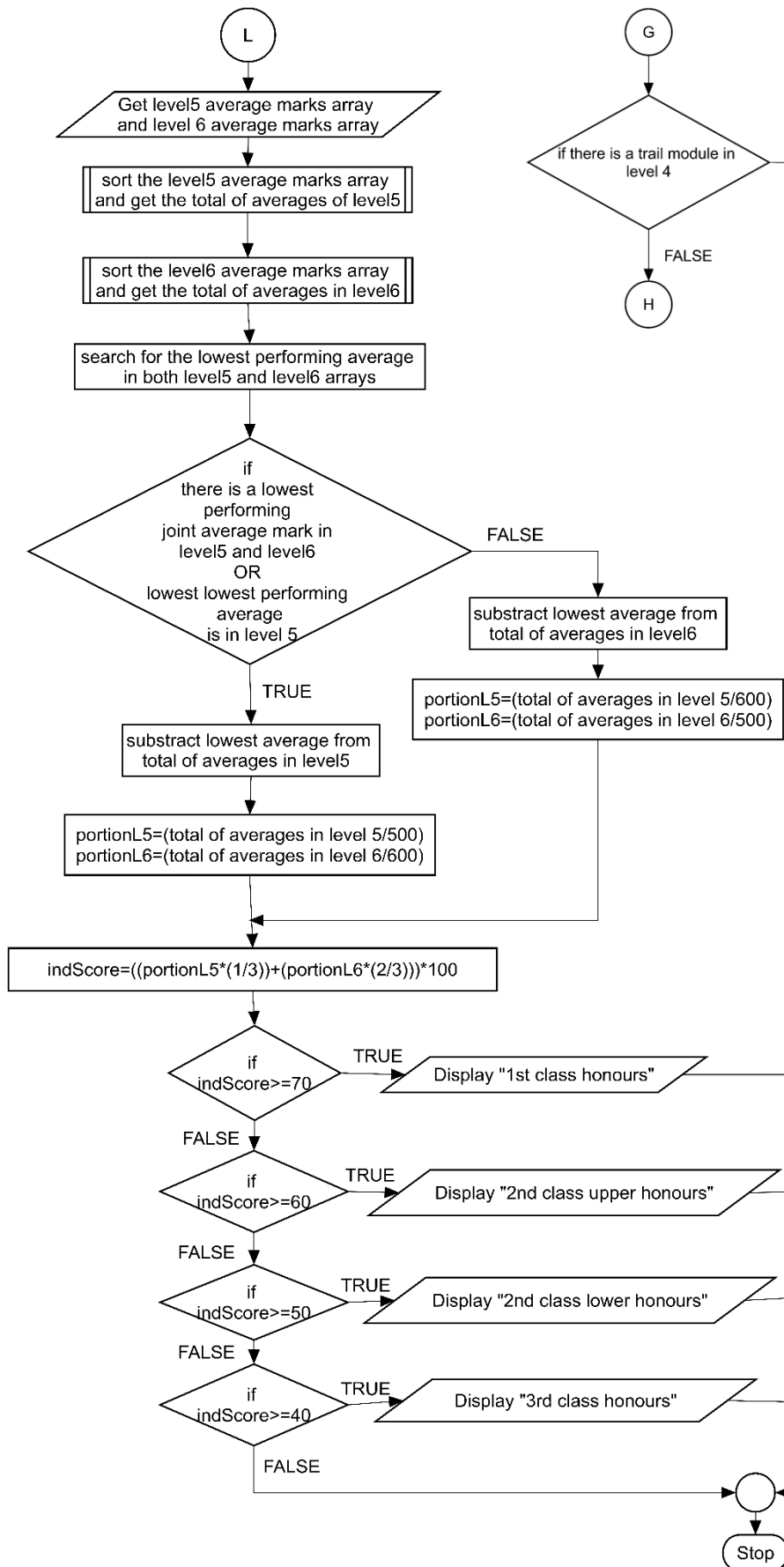
ELSE

Display "Student has been excluded"

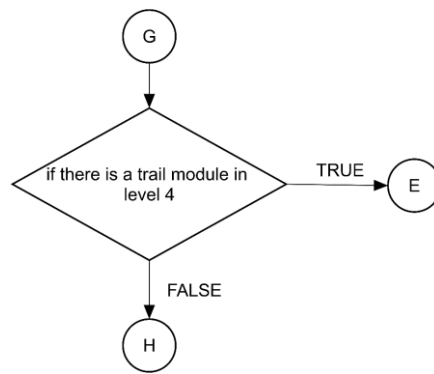
END



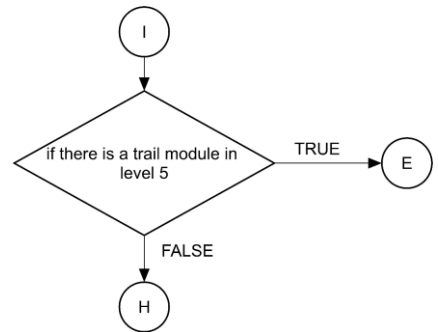
### Award Calculation (Flowchart 09)



### Level 5 (Flowchart 10)



### Level6 (Flowchart 11)



# LIST OF FIGURES

|              |                                   |
|--------------|-----------------------------------|
| Flowchart 01 | Administrator Login               |
| Flowchart 02 | Level 4 initial mark getter       |
| Flowchart 03 | Level 4 initial pass/fail setter  |
| Flowchart 04 | Level 4 condone setter            |
| Flowchart 05 | Level 4 Result Print              |
| Flowchart 06 | Attempt mark getter               |
| Flowchart 07 | Attempt pass/fail setter          |
| Flowchart 08 | Level 5,6 Result Print            |
| Flowchart 09 | Award Calculation                 |
| Flowchart 10 | Level 5                           |
| Flowchart 11 | Level 6                           |
| Figure 1     | Admin login(invalid credentials)  |
| Figure 2     | Invalid input(letters)            |
| Figure 3     | Invalid input(unacceptable marks) |
| Figure 4     | Award Classification              |
| Figure 5     | Level 4 results(all passed)       |
| Figure 6     | Exclusion                         |
| Figure 7     | Re-enter marks for failed modules |

# SCREEN SHOTS

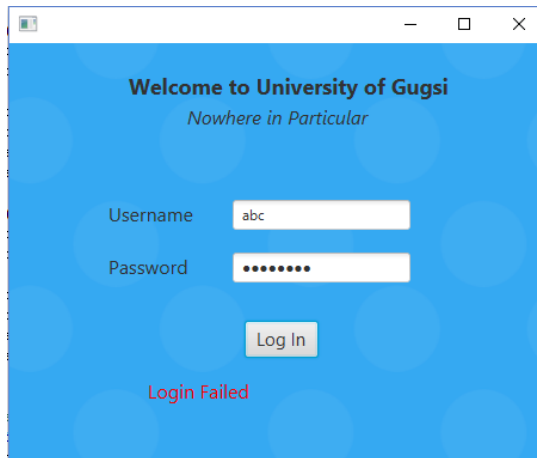


Figure 01

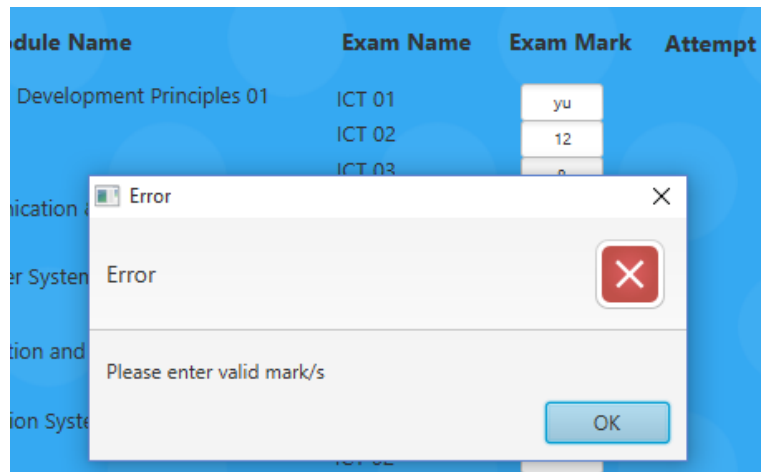


Figure 02

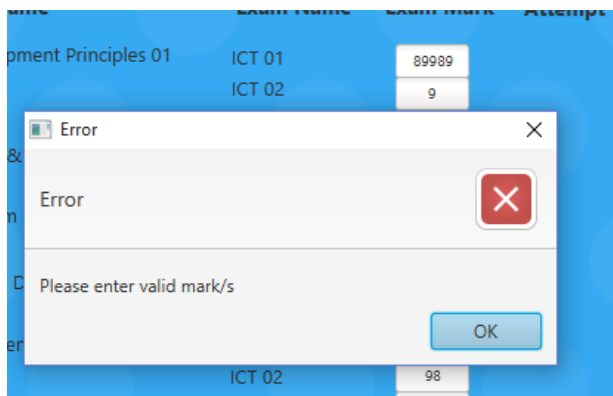


Figure 03

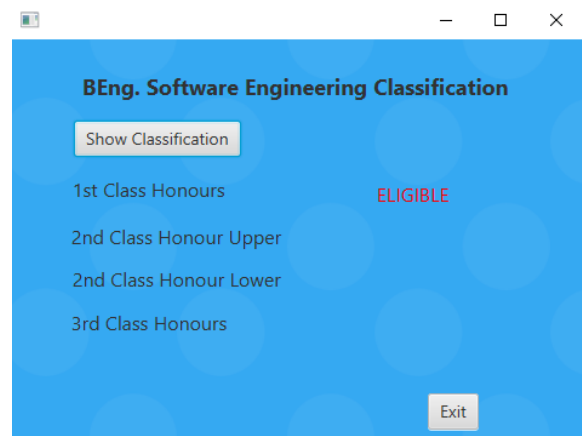


Figure 04

LEVEL 04

| Module No:              | Module Name                        | Exam Name              | Exam Mark | Attempt | Status | Condoned |
|-------------------------|------------------------------------|------------------------|-----------|---------|--------|----------|
| 01                      | Software Development Principles 01 | ICT 01                 | 78        | 1       | Pass   | No       |
|                         |                                    | ICT 02                 | 87        |         |        |          |
|                         |                                    | ICT 03                 | 87        |         |        |          |
| 02                      | Communication & Career Management  | Portfolio Presentation | 87        | 1       | Pass   | No       |
| 03                      | Computer System Fundamentals       | ICT 01                 | 87        | 1       | Pass   | No       |
|                         |                                    | ICT 02                 | 87        |         |        |          |
| 04                      | Information and Data Modeling      | ICT 01                 | 87        | 1       | Pass   | No       |
|                         |                                    | ICT 02                 | 87        |         |        |          |
| 05                      | Information Systems                | ICT 01                 | 87        | 1       | Pass   | No       |
|                         |                                    | ICT 02                 | 87        |         |        |          |
| 06                      | Software Development Principles 02 | ICT 01                 | 87        | 1       | Pass   | No       |
|                         |                                    | ICT 02                 | 87        |         |        |          |
|                         |                                    | ICT 03                 | 87        |         |        |          |
| Level Status            |                                    | Pass                   |           |         |        |          |
| Level Credits           |                                    | 120                    |           |         |        |          |
| Condoned Credits        |                                    | 0                      |           |         |        |          |
| Level Average           |                                    | 86.5                   |           |         |        |          |
| Exclusion Status        |                                    | NO                     |           |         |        |          |
| Eligibility to Level 05 |                                    | Eligible               |           |         |        |          |
| Eligibility to CertHE   |                                    | Eligible               |           |         |        |          |
| CertHE Classification   |                                    | Distinction            |           |         |        |          |
|                         |                                    |                        |           | Next    | Exit   |          |

Figure 05

## LEVEL 04

| Module No: | Module Name                        | Exam Name    | Exam Mark | Attempt | Status | Condoned |
|------------|------------------------------------|--------------|-----------|---------|--------|----------|
| 01         | Software Development Principles 01 | ICT 01       | 89        |         | Pass   | No       |
|            |                                    | ICT 02       | 98        |         |        |          |
|            |                                    | ICT 03       | 89        |         |        |          |
| 02         | Communication & Career Management  | Portfolio    | 98        |         | Pass   | No       |
|            |                                    | Presentation | 98        |         |        |          |
| 03         | Computer System Fundamentals       | ICT 01       | 0         |         | Fail   | No       |
|            |                                    | ICT 02       | 0         |         |        |          |
| 04         | Information and Data Modeling      | ICT 01       | 0         |         | Fail   | No       |
|            |                                    | ICT 02       | 0         |         |        |          |
| 05         | Information Systems                | ICT 01       | 0         |         | Fail   | No       |
|            |                                    | ICT 02       | 0         |         |        |          |
| 06         | Software Development Principles 02 | ICT 01       | 0         |         | Fail   | No       |
|            |                                    | ICT 02       | 0         |         |        |          |
|            |                                    | ICT 03       | 0         |         |        |          |

Level Status: Fail

Level Credits: 40

Condoned Credits: 0

Level Average: 31.666...

Exclusion Status: Student has been EXCLUDED

Eligibility to Level 05: Not Eligible

Eligibility to CertHE: Not Eligible

CertHE Classification: No

Figure 06

## LEVEL 05

| Module No: | Module Name                 | Exam Name     | Exam Mark | Attempt | Status |
|------------|-----------------------------|---------------|-----------|---------|--------|
| 01         | Object Oriented Programming | ICT 01        | 87        | 1       | Pass   |
|            |                             | ICT 02        | 87        |         |        |
| 02         | Client Server Architecture  | ICT 01        | 87        | 1       | Pass   |
|            |                             | ICT 02        | 78        |         |        |
| 03         | System Development          | Group Project | 87        | 1       | Pass   |
| 04         | Database Systems            | ICT 01        | 87        | 1       | Pass   |
|            |                             | ICT 02        | 87        |         |        |
| 05         | Algorithms                  | ICT 01        | 0         | 2       | Fail   |
|            |                             | ICT 02        | 0         |         |        |
| 06         | Optional Module             | ICT 01        | 0         | 2       | Fail   |
|            |                             | ICT 02        | 0         |         |        |

Level Status: Fail

Level Credits: 80

Level Average: 57.25

Exclusion Status: NO

Eligibility to Level 06: Not Eligible

Eligibility to DipHE: Not Eligible

DipHE Classification: No

Please Enter Exam Mark/s for Failed Module/s

Figure 07