

Task 1:

Create a menu script that has the following selections (Figure 1):

```
College Management Menu
=====
S – Add New Students
C – Add New Courses
M – Grade Students

Q – Quit (exit from program)

Please select a choice:
```

Figure 1: Menu Selection

Task 2:

If user has selected “S” to Add New Students, the system should redirect the user to “Programme Selections Menu” form. The output of the screen should be similar to Figure 2.

```
Programme Selections Menu
=====

T – RIT ( Bachelor in Information Technology)
D – RSD (Bachelor in Software Development)
S – RST (Bachelor in Interactive Software Technology)
E – REI (Bachelor in Enterprise Information System)
F – RSF (Bachelor in Software Engineering)

Q – Quit (Return to College Management Menu)

Please select a choice:
```

Figure 2: Programme Selections Menu

After the user has selected a programme, the system should request the user to enter the student details. The output of the screen should be similar to Figure 3.

Add New Student Form

=====

Student ID :

Student Name :

Birth Date :

Contact Number :

Add Another Student? (y) es or (q) uit :

Press (q) to return to College Management Menu

Figure 3: Add New Students form

The output of the student details should be stored in student.txt file. Refer to Sample 1.

```
RIT:17WMR12345:Tan Mei Lee:12-12-2000:012-9999999
RIT:17WMR12346:Handsome Lim Chun Jie:20-12-2001:012-8888888
RIT:17WMR12347:Chan Mei Lee:12-2-1999:012-7777777
REI:16WMR12348:Tan Dandan:12-1-2000:012-666666666
REI:16WMR12349:Pretty Lim Meu Li:20-8-2000:012-5555555
RSD:16WMR1230:Chun Wai Kit:2-12-2000:012-4444444
RSD:16WMR12000:Donald Lim:3-3-2000:012-3333333
RST:16WMR12002:Donut Kum:4-4-2000:012-2222222
RST:16WMR12003:Good Luck Man:5-5-2000:012-1111111
RST:16WMR12004:Sui Sui Girl:6-6-2000:012-1000000
```

Sample 1: student.txt

Task 3

If the user has selected “C” to Add New Course, the output of the screen should be similar to Figure 4.

Add New Course Form

=====

Course Code :

Course Name :

Credit Hours :

Add Another Course? (y) es or (q) uit :

Press (q) to return to College Management Menu

Figure 4: Add New Course Form

The output of the course details should be stored in course.txt file. Refer to Sample 2.

```
BACS1234:Information Technology:4
BACS2053:Object-Oriented Programming:3
BACS2093:Operating Systems:3
BAIT2112:Digital Multimedia:2
BAIT3113:VB.net Programming:3
```

Sample 2: course.txt

Task 4:

Write a script file that stores the marks range as below:

Marks Obtained	Grade	Remarks
80 – 100	A	Excellent
75 – 79	A-	Excellent
70 – 74	B+	Good
65 – 69	B	Good
60 – 64	B-	Pass
55 – 59	C+	Pass
50 – 54	C	Pass
45 – 49	D	Failed
40 – 44	E	Failed
0 – 39	F	Failed
>100 or < 0	Prompt Error Message “Invalid Marks Range!”	

If user has selected “M” to Grade Students, the system should redirect the user to “Student Validation Form”. The output of the screen should be similar to Figure 5.

Student Validation Form
Please enter the student’s ID Number:
Student Name (auto display):
Programme (auto display):
Press (n) to continue to enter the student’s marks or (q) to quit from the prompt:

Figure 5: Student Validation Form

If the user has **Press (n)**, the system will redirect the user to “Student Examination Marks Form” in Figure 6.

Student Examination Marks Form
Please enter the course code:
Please enter the marks obtained:
Press (y) to continue to enter the student’s marks or (b) to back previous :

Figure 6: Student Examination Marks Form

If the user **Press (y)**, the system should be allowed the user to enter another course code with marks obtained for the same student. Refer to Sample 3. However, if the user has Press (b), the system will back to the previous screen (**Refer to Figure 5**).

Note: The system should be able to read the student.txt and course.txt files to perform simple validation based on the studentID and course code.

The output of results should be stored in a ASCII text file (according to the course code) named 17WMR12345Result.txt (refer to Sample 3) as shown below.

Sample 3

Student ID : 17WMR12345

Student Name : Tan Mei Lee

=====			
Course Code:	Marks Obtained:	Grade Obtained:	Remark:
=====			
BACS2053	50	C	Pass
BACS2093	70	B+	Good
BAIT2112	80	A	Excellent

Sample 3: Output of Exam Result for a student